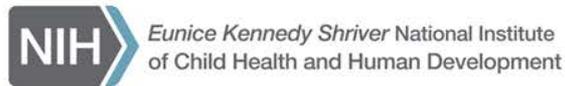


Division of Intramural Population Health Research

Eunice Kennedy Shriver National Institute of Child Health and
Human Development





Division *of* Intramural Population Health Research

- Who we are
- What we do
- Metrics of leading discovery & mentoring



Who we are...



Mission

- **Mission:** To conduct research leading to the promotion of population health and well-being.



Eunice Kennedy Shriver National Institute of Child Health and Human Development

Office of the Director

Admin

Global Health

Health Equity

Public Policy

Science Policy

Communication

Prevention

Division of Extramural Research

Division of Intramural Population Health Research

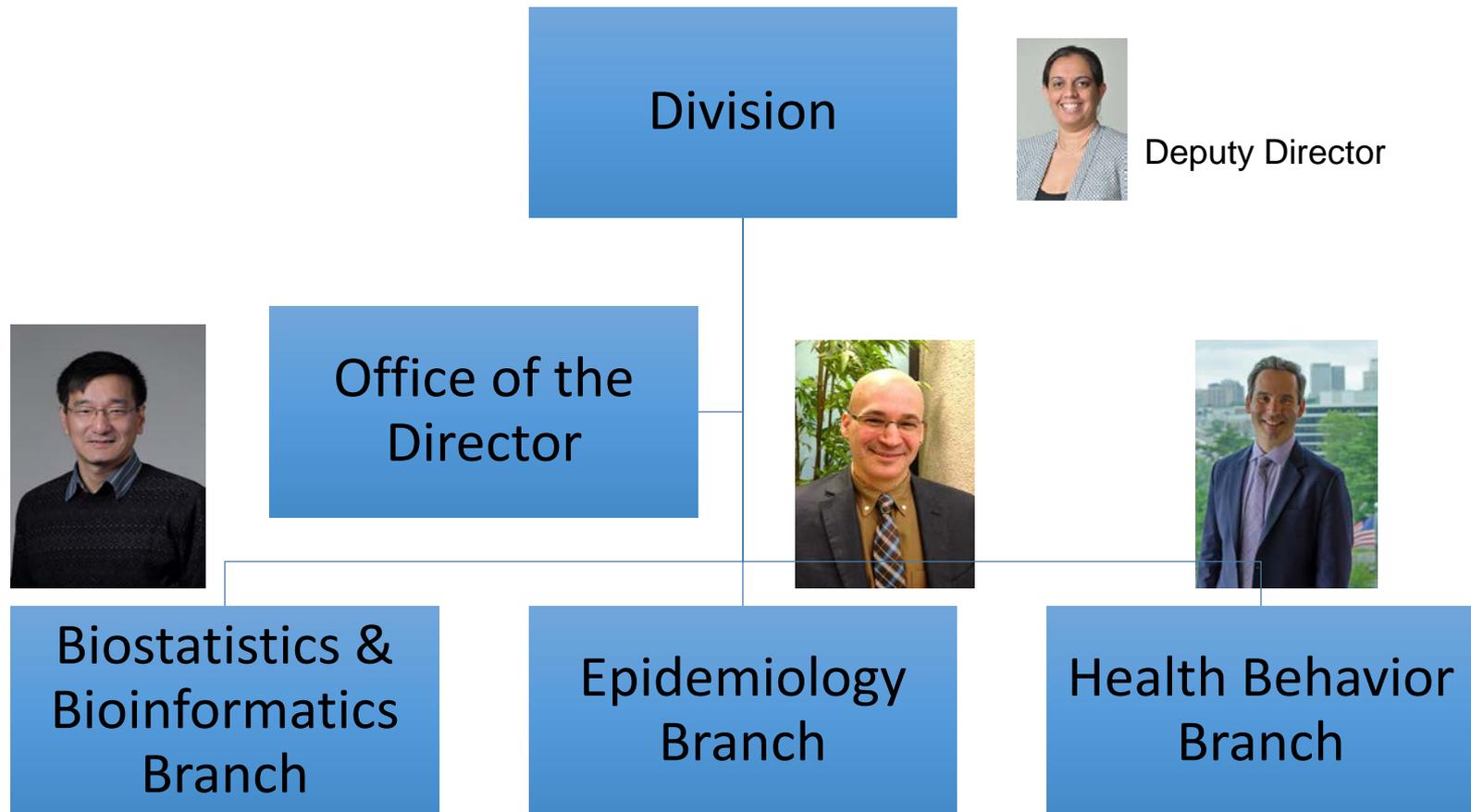
Division of Intramural Research

National Center for Medical Rehabilitation Research



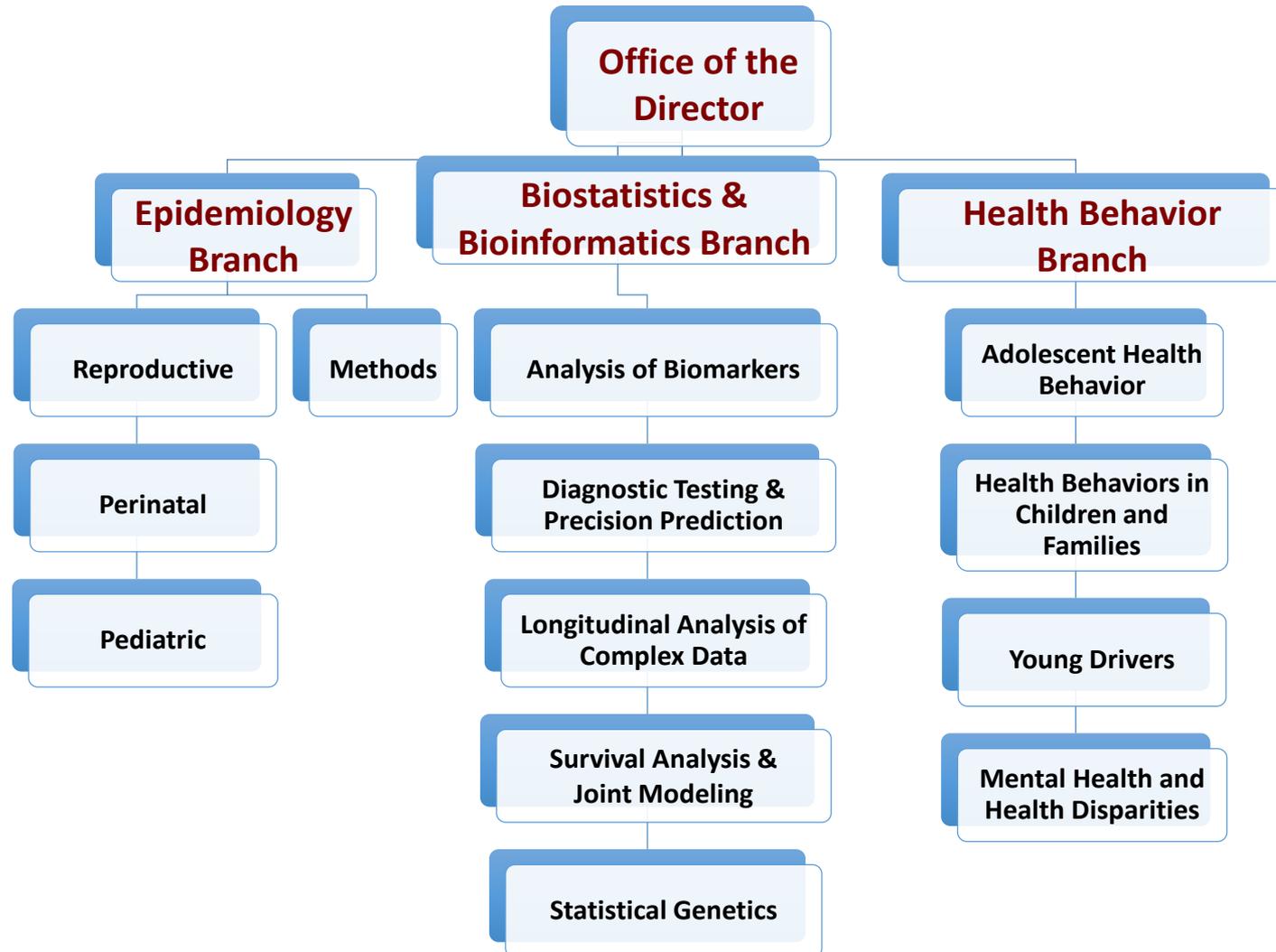
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Research Expertise





What we do...

Promoting health for populations across the lifespan

(understanding the early origins of health & well-being)



Preconception Window

- Discoveries

- Diet & lifestyle influences on normal menstrual cycle function
- Environment & lifestyle affects fecundity & related impairments (e.g., infertility, pregnancy loss)
- Preconception low dose aspirin improves live birth rate among women with inflammation



A Study of the National
Institutes of Health



- Research in progress

- Zinc/folate supplement may improve semen quality & infertility treatment outcomes
- Diet may improve female fecundity & fertility





In Utero Window

- Discoveries

- Race/ethnic specific differences in fetal growth
- Twin trajectories differ from singletons starting at 32 weeks



- Research in progress

- Early origins of mental health & suicide
- Diet & food satiety and pregnancy outcomes
- GDM exposure & offspring's health





Infancy & Childhood

- Discoveries

- Mode of conception not associated with growth and development through age 3 years
- Behavioral interventions associated with better management of type 1 diabetes in children



- Research in progress

- Maternal food reward sensitivities & self-regulation programming infant's sensitivities, diet & growth





Adolescent & Young Adulthood

- Discoveries

- College students reported more binge drinking & blackouts, behaviors associated with school, work, police, and personal problems
- Teenage drivers engaged in secondary tasks had 4-8 times crash risk



- Research in progress

- Identifying optimal driving behaviors for new drivers to minimize/prevent crashes... understanding their behavioral etiology



Reproductive health – early markers of health across the lifespan

- Research in progress

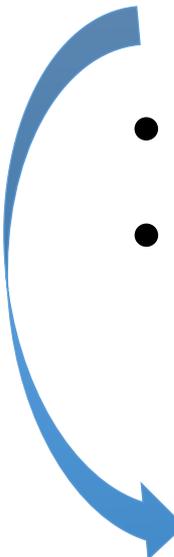
- Etiology & prevention of GDM transition to T2D
- Impaired fecundity in pathway to gynecologic disorders
- Reproductive health & mortality





Emerging Research Areas

- Epigenetic reprogramming & fetal resilience
- Couple and family-based studies (e.g., pregnancy timing outcomes, children's development, trans-generational influences)
- Reproductive health in the pathway to adult health
- Methods & analytic tools (e.g., causal inference, exposome, hierarchical & high dimensional data)

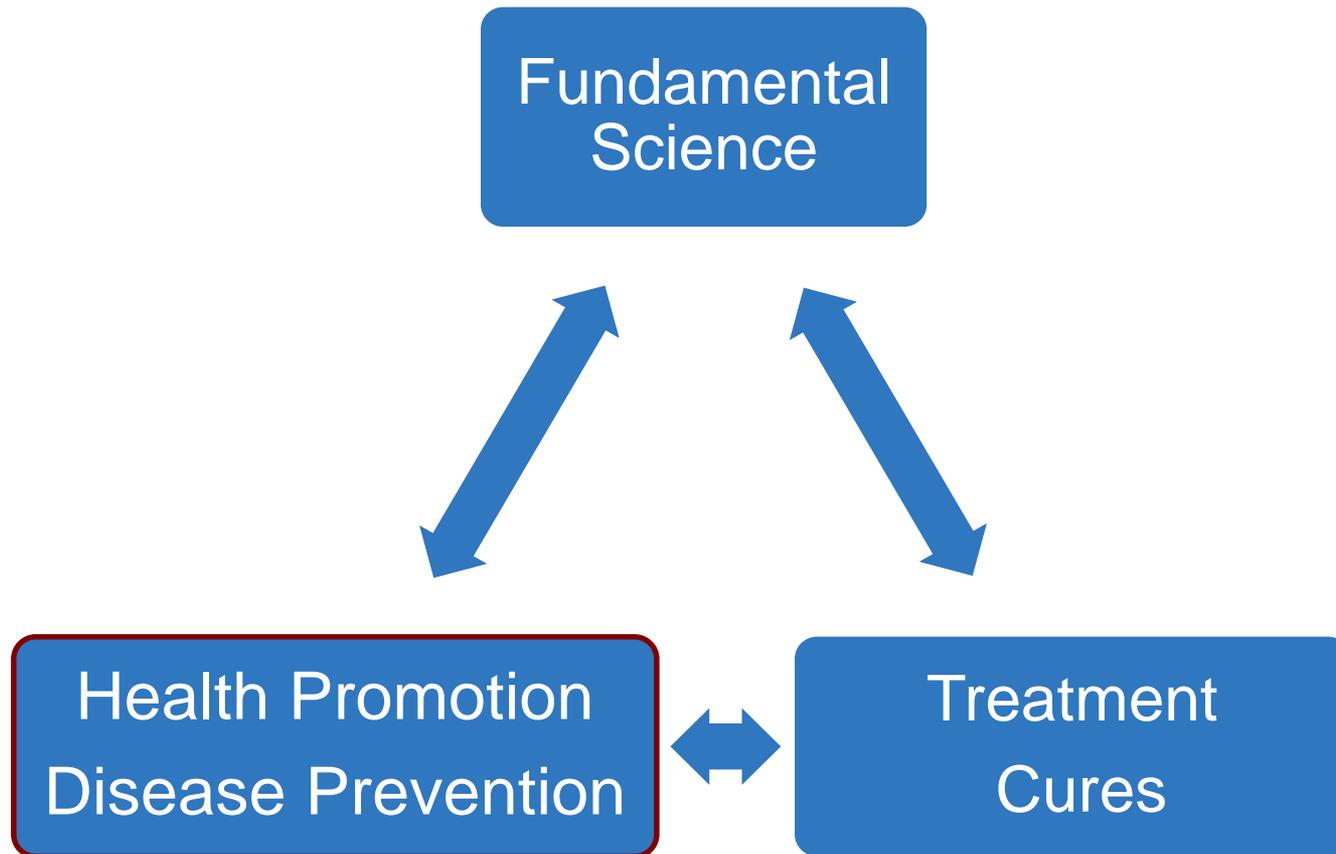


Promoting health with guidance & targeted interventions



NIH-Wide Strategic Plan Framework, 2016-2020

(turning discovery into health)





President Franklin D. Roosevelt's dedication of the NIH
"...to the underlying philosophy of **public health**..."

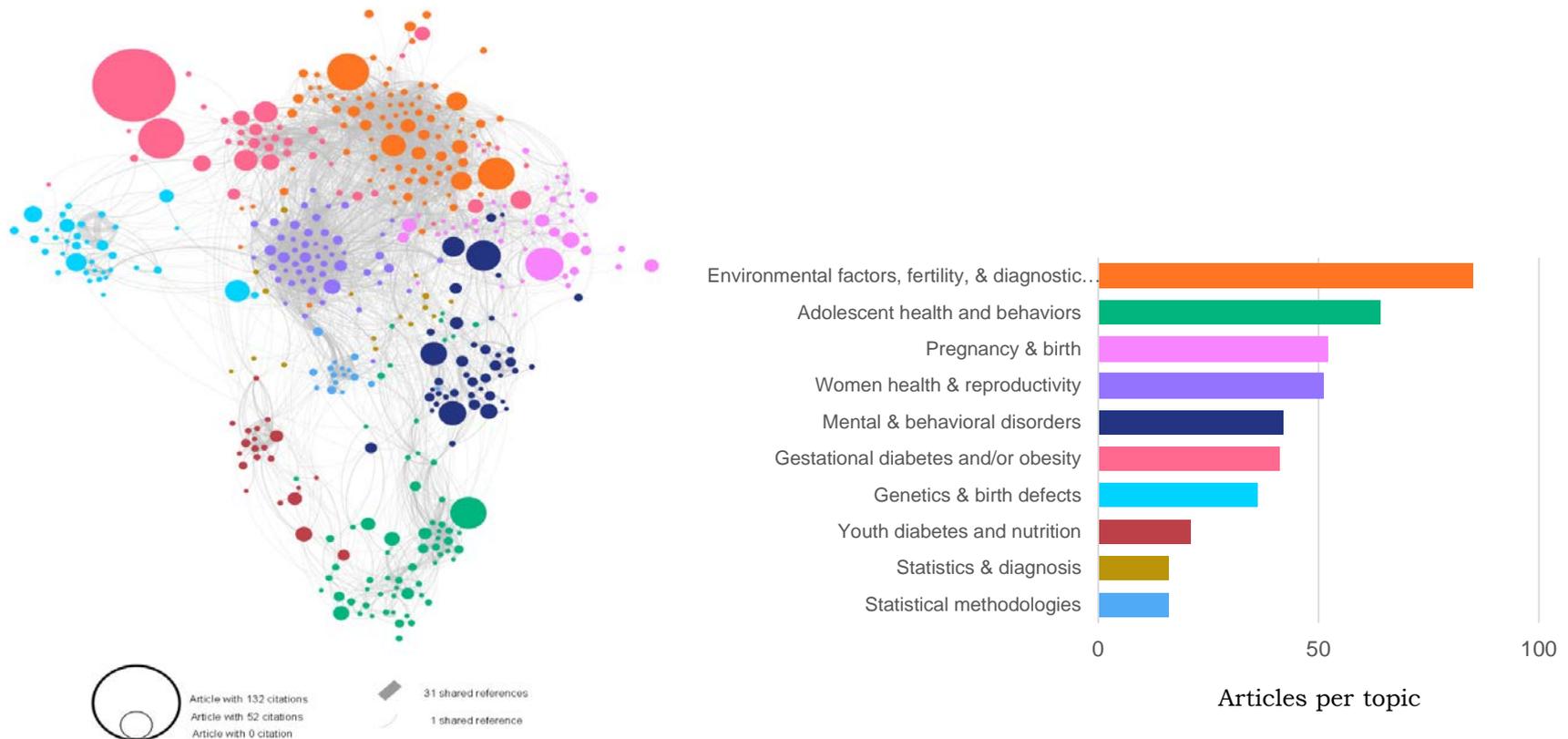


Measuring our impact

(research, mentoring, professional service, health)



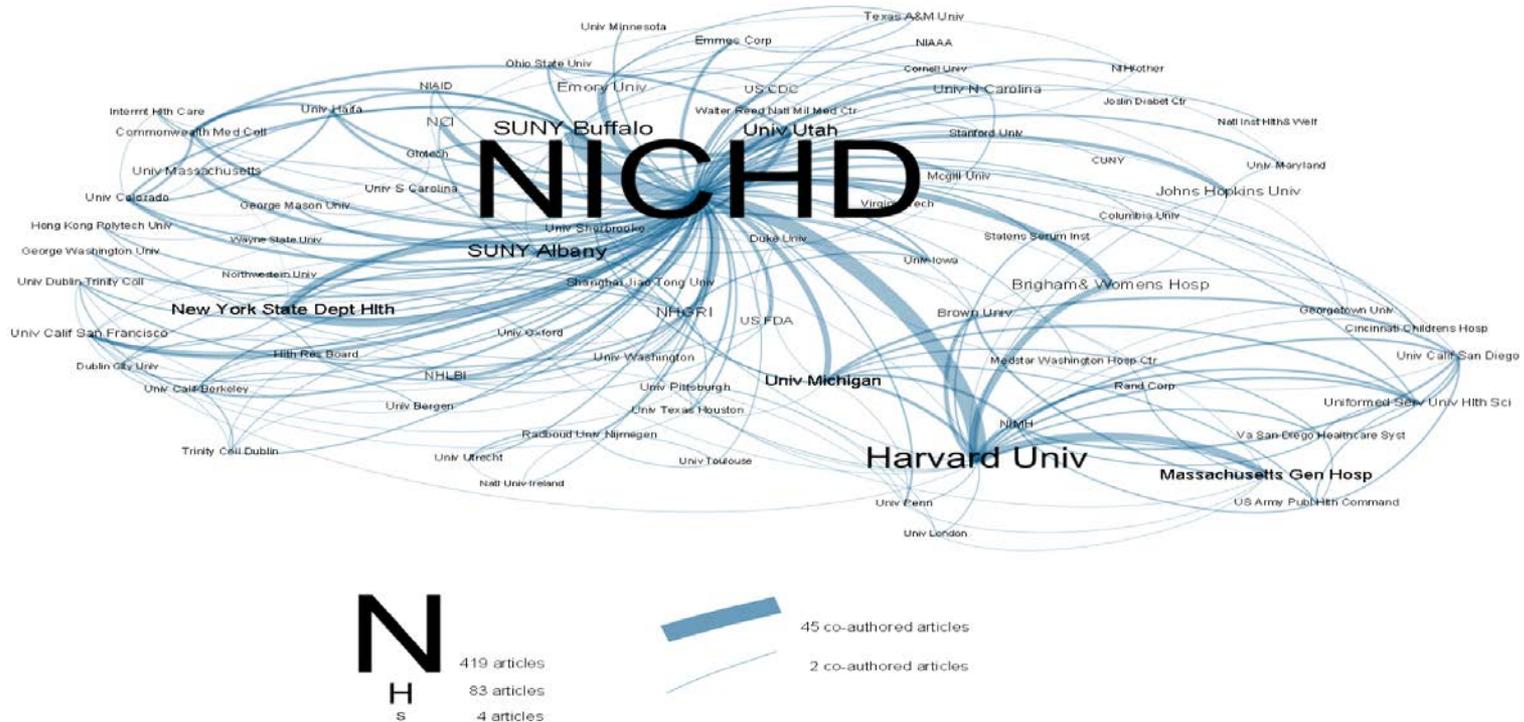
Publication Impact, 2012-2015



Bibliometric evaluation of 419 papers published for 1+ year, NIH Division of Library Services.
Division had 509 publications between 2012-2015.



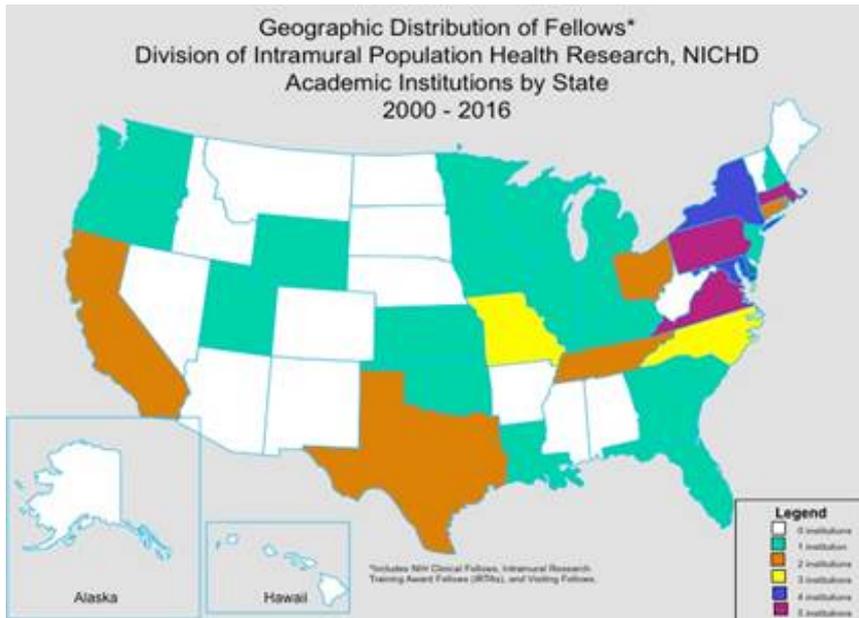
Extramural Collaborations, 2012-2015



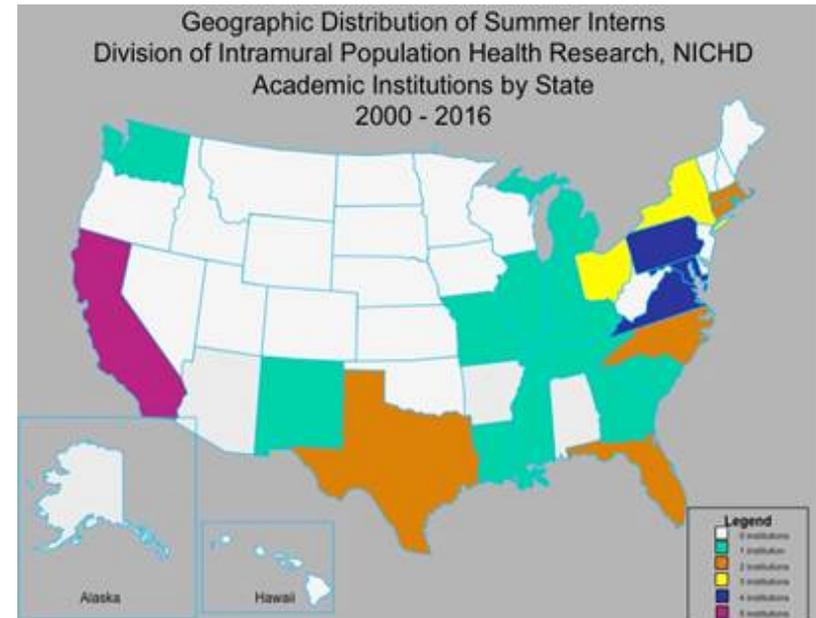
Listing of the top 10 institutions with co-authored publications as derived from listed institutional affiliations. Biometric evaluation conducted by the NIH Division of Library Services.



Geographic Distribution of Fellows & Summer Interns, 2000-2015



Fellows, DIPHR



Summer Interns, DIPHR

Mentoring: Views from Both Sides of the Desk

Joe Bible, Miriam Eisenberg, Ana
Maria Ortega-Villa, Sarah Pugh, Rose
Radin, Melissa Smarz, Wondan
Y.





Other Metrics, 2012-2015

- 26 press releases
 - Seen by 4.5 billion people globally (and an additional 268k Spanish speaking individuals)
- 8,902 statistical software downloads
<https://www.nichd.nih.gov/about/org/diphr/bbb/software/fan/Pages/default.aspx>



Impact – leveraging resources

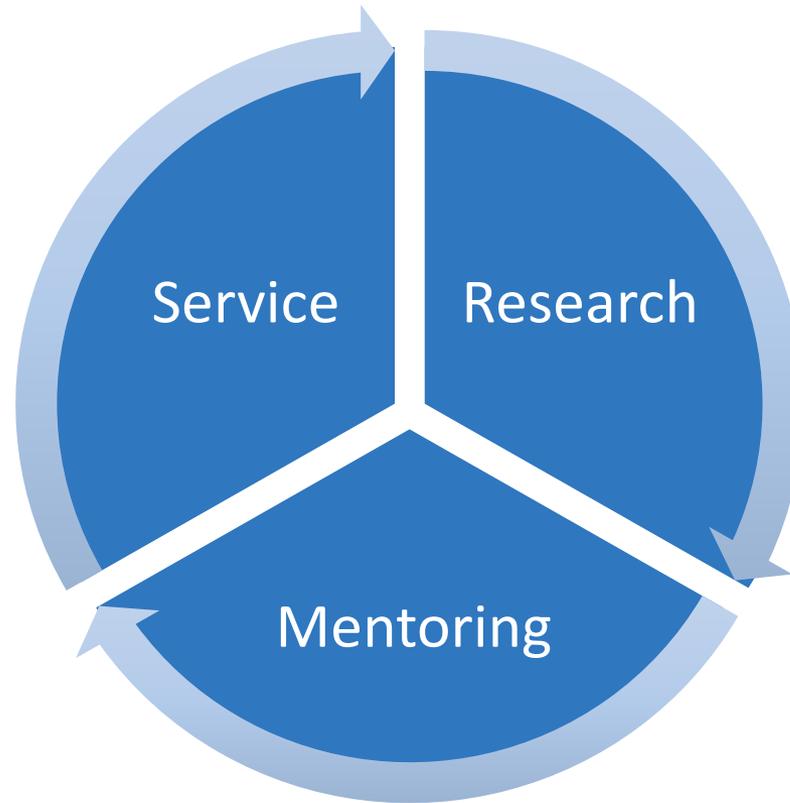
- NICHD Fetal Growth Studies leveraged for NIH's ECHO initiative
- Web-based calculators & apps
 - Race/ethnic fetal growth standards





Division

(meeting our mission... serving our populations)



50th Anniversary in 2017



Thank you...





Operating Budget, 2012-2017

	2012	2013	2014	2015	2016	2017
Personnel	5,132,392	4,865,923	4,592,322	4,789,031	5,321,623	--
Training	1,055,483	1,150,214	1,495,988	1,423,369	1,492,205	--
Other costs	391,467	335,552	390,140	398,408	318,172	--
NICHD taps	---	---	1,075,000	1,285,000	1,914,000	--
Total	6,902,000	6,352,000	7,553,000	7,896,000	9,047,000	--
% NICHD Intramural Budget	3.7	3.6	4.1	4.2	4.8	--



Research Budget, 2012-2017

	2012	2013	2014	2015	2016	2017
Intramural Funding	13,000,000	13,500,000	13,500,000	13,544,000	13,800,000	--
Other Funding*	2,236,043	409,766	2,939,090	981,355	220,000	--

*This includes funding from grants, other institutes and sources.



Intramural Research Budgets, NICHD, 2012-2016*

	FY2012	FY2013	FY2014	FY2015	FY2016
DIR (N= 73 tenure track & senior investigators)					
Labs & clinics**	105,003	95,179	96,627	96,627	100,490
Assessments	59,771	60,070	63,580	63,013	63,608
PPRO contract	15,500	17,022	15,645	16,318	17,153
DIR Subtotal	179,774	172,271	175,852	176,980	181,251
DIPHR (N= 17 tenure track & senior investigators)					
Operating costs	6,579	6,352	6,478	6,611	6,894
Assessments	--	--	1,075	1,285	1,927
R & D contracts	15,001	13,849	16,384	14,466	14,020
DIPHR Subtotal	6,902	6,352	7,553	7,896	8,821
Total	186,676	178,623	183,405	184,876	190,073

*In thousands of dollars; **Includes renovations
Cost per investigator \$2.5 and \$n, respectively



Strategic Plan, 2017-2022

- Early origins of health & disease
- Clinical trials of low-cost interventions
- Building methods & tools for hierarchical, high dimensional & longitudinal data
- Implementation & dissemination sciences
- Capacity building through mentoring, data sharing, leveraging talent & resources