

## Existing installations

- http://latticegrid.feinberg.northwestern.edu
- https://latticegrid.cancer.northwestern.edu
- https://latticegrid.cancer.ucsf.edu
- http://latticegrid.cancer.stanford.edu/

Internal installations

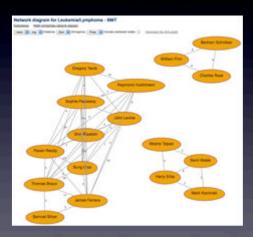
Case Western
CINJ
U Michigan
Fox Chase

#### How to get LatticeGrid

- About:
   <a href="http://wiki.bioinformatics.northwestern.edu/index.php/">http://wiki.bioinformatics.northwestern.edu/index.php/</a>
   LatticeGrid
- Download: <a href="http://github.com/wakibbe/LatticeGrid/">http://github.com/wakibbe/LatticeGrid/</a>
- Download: <a href="http://github.com/nubic/LatticeGrid/">http://github.com/nubic/LatticeGrid/</a>

#### What is LatticeGrid?

LatticeGrid models enable evidence-based decisions about how best to manage and direct organizational change to maximize the effectiveness of translational science initiatives. LatticeGrid enables biomedical research organizations to monitor and measure more effectively collaboration and funding patterns. By studying how these patterns change with time, organizations can use this information to evaluate the effectiveness of changes in organizational structure and policies. Understanding how shifts in institutional structure and policy affect translational science patterns of collaboration and funding is of fundamental importance to the biomedical research community. This knowledge provides a mechanism to evaluate the "return on investment" for team science efforts.



## Original drivers for LatticeGrid

- Generate CCSG-formatted publication lists by program
- Enable measurement of intra- and inter-program publications
- Provide a public presence for Cancer Center publications
- Extension to publications for the entire organization

#### Value Proposition

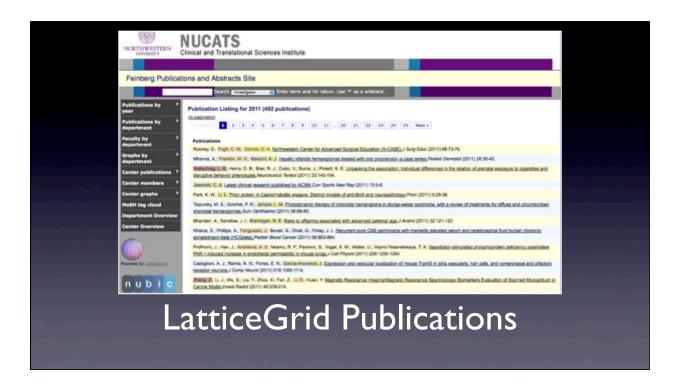
- Manage organizational publication lists for reporting and metrics
- Provide tools for highlighting faculty publications
- Provide tools for the identification of researchers involved in a specific area
- Provide tools to visualize collaborations

### Requirements

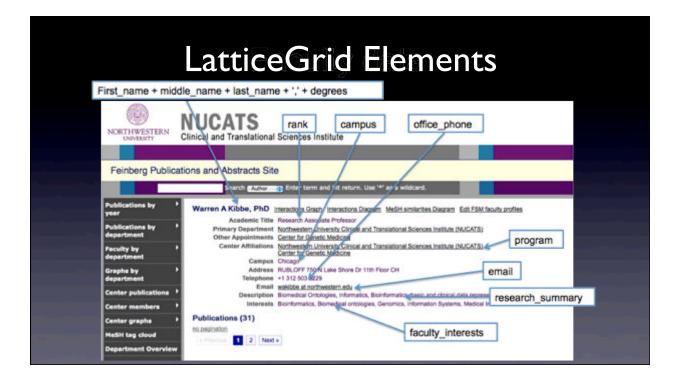
- LatticeGrid supports automated mining of PubMed data no investigator input necessary
- LatticeGrid supports vetted database feeds of PubMed or ISI Web of Science feeds for faculty publications
- LatticeGrid takes vetted lists of organizations and faculty memberships to build collaboration 'lattices'

#### LatticeGrid Features

- Detailed faculty listing by program
- MeSH searching
- MeSH listing and tag clouds
- Co-author and similar author lists
- Sparklines for papers per year on individual author and program pages.
- High Impact publication list







#### MeSH Keywords

Brown, K. E.; Usman, A.; Klobe, M. R.; Morasch, M. D.; Matsumura, J. S.; Pearce, W. H.; Amaranto, D. J.; Eskandari, M. K. <u>Carolid stenting using</u> tapened and nontapered stents: associated neurological complications and restences rates. *Ann Vasc Surg* (2009) 23:439-445.

Heyer, K. S.; Modi, P.; Monaich, M. D.; Mataumuna, J. S.; Klobs, M. R.; Pearce, W. H.; Resnick, S. A.; Eskandan, M. K. Secondary infections of thoracic and abdominal acris; engagrafts, J Vasc Interv Radiol (2009) 20:173-179.

Kapadia, M. R.; Eng. J. W.; Jang, Q.; Stoyanovsky, D. A.; Kibbe, M. R.; hibric oxide regulates the 26S protessome in vascular amonth muscle caris, Netric Oxide (2009) 20:279-288.

Riber, M. R.: Troppmann, C.; Barnett, C. C. Jr; Nwomeh, B. C.; Oktoye, O. O.; Doria, C.; Kim, R. D.; Mankani, M. H.; Corbett, S. A.; Biff, W. L.; Schwarzw, M. L. Effect of educational dett on career and quality of life among academic surpeons. *Ann Surg* (2009) 249:342-348.

McDermott, M. M.; Ades, P.; Gurainik, J. M.; Dyer, A.; Ferrucci, L.; Liu, K.; Nelson, M.; Lloyd-Jones, D.; Van Hom, L.; Gareide, D.; Köbe, M.; Domanchuk, K.; Stein, J. H.; Liao, Y.; Tao, H.; Green, D.; Pearce, W. H.; Schneider, J. R.; McPherson, D.; Laing, S. T.; McCarthy, W. J.; Shroff, A.; Criqui, M. H. Treadmill exercise and resistance training in patients with peripheral arterial disease with and without intermittent claudication; a randomized controlled trial. AMAI (2009) 30::165-174.

McDermott, M. M.; Domanchuk, K.; Dyer, A.; Ades, P.; Wible, M.; Criqui, M. H. Recruting participants with peripheral arterial disease for clinical trials: experience from the Study to Improve Leg Circulation (St.C), J Vasc Surg (2009) 49:453-459-44.

Payvandi, L.; Dyer, A.; McPherson, D.; Ades, P.; Stein, J.; Liu, K.; Ferrucci, L.; Crigui, M. H.; Gurainik, J. M.; Lioye-Jones, D.; Köbo, M. R.; Liang, S. T.; Kane, B.; Pearce, W. H.; Verts, M.; McCarthy, W. J.; Schneider, J. R.; Shroff, A.; McDermott, M. M. Physical activity during daily life and brachial activity during daily life and brachial activity during daily life and brachial activity during daily life.

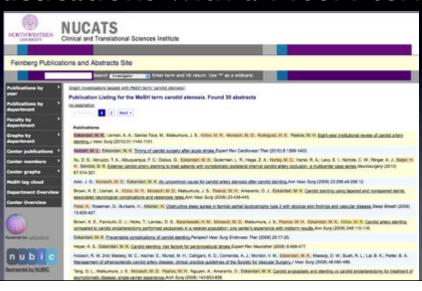
Ahanchi, S. S.; Varu, V. N.; Taihis, N. D.; Martinez, J.; Pearce, C. G.; Kapedia, M. R.; Jiang, Q.; Saavedna, J. E.; Keefer, L. K.; Hrabie, J. A.; Klöber, K. R.; Heightened efficacy of nitro oxide-based therapies in type it disbetes mellitus and metabolic syndrome. Am J Physiol Heart Circ Physiol (2008) 3261-32361-42386.

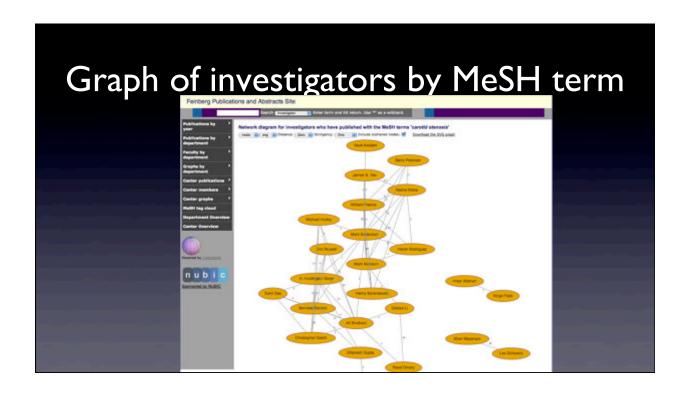
Keywords (MeSH):

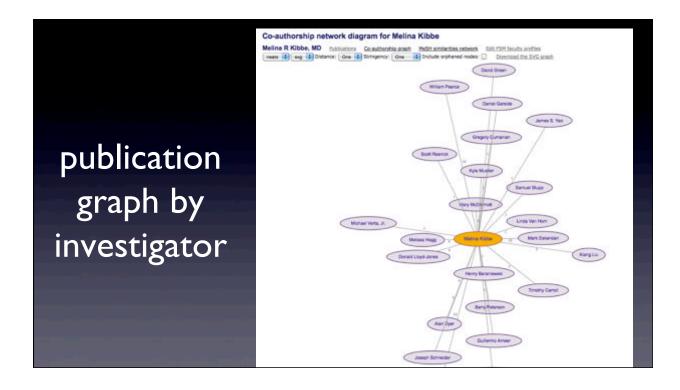
surgery in the rough of the rou

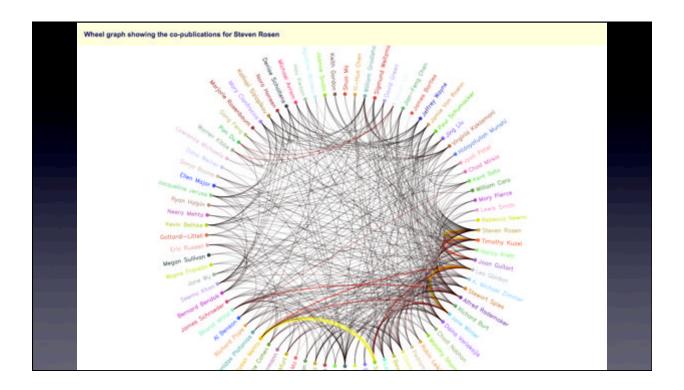
more

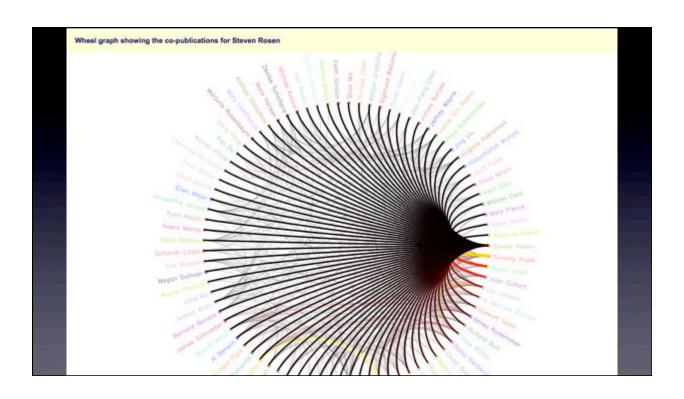
#### Publications with a MeSH term

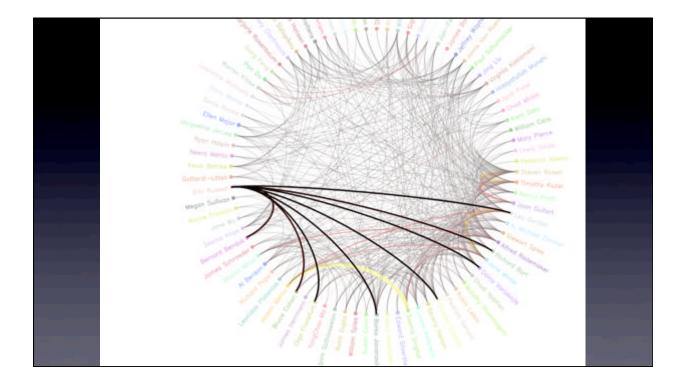


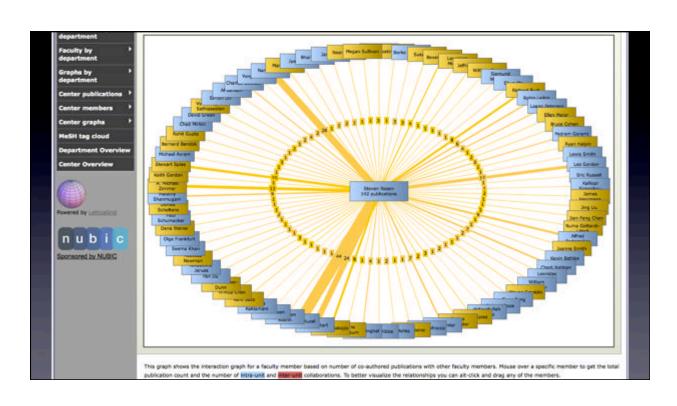


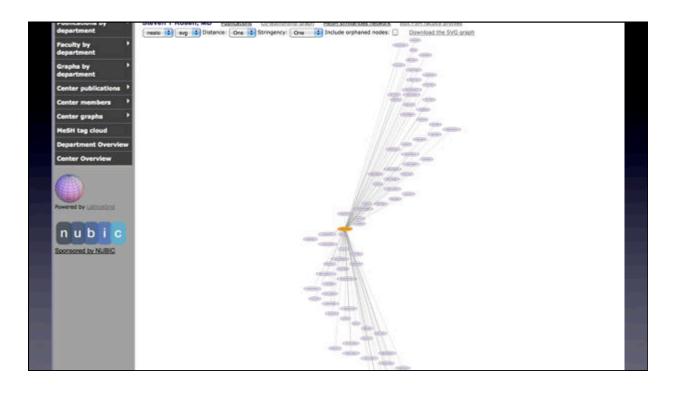


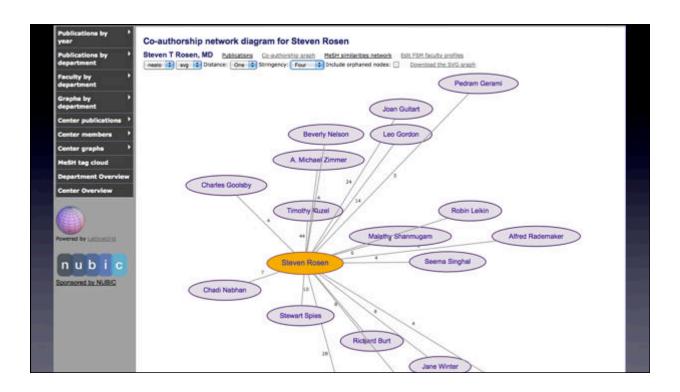


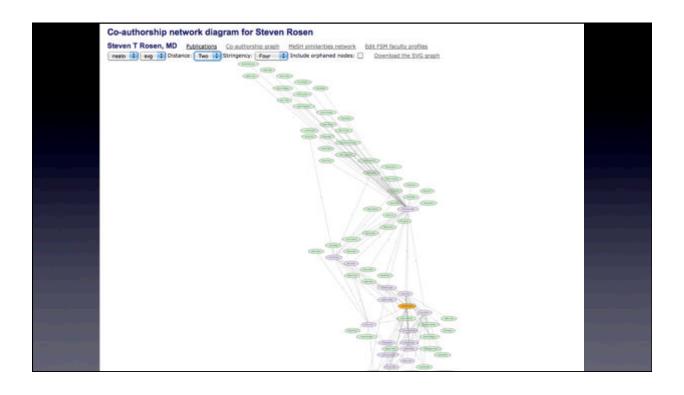


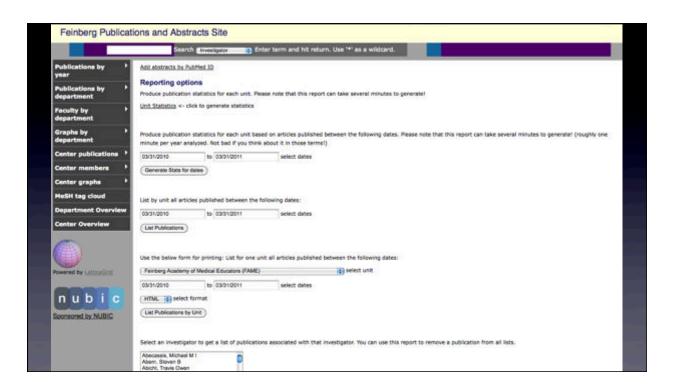














4				lical Informatics Overview	
	publication	s. Publicatio	in Listin	g from 1/1/2009 to 1/1/2011	
	PubMed ID	PMC ID	Impact	Publications	
	19382862	PMC2956565	0.967	Hillman, C. A.; Cmino, J. J.; Lai, A. M.; Kaufman, D. R.; Starren, J. B.; Shee, S. The effects of redesigning the IDEATsLarchitecture on glucose. uglosds, Telemed J E Health (2009) 15:248-254.	Stamen
	21169620	PMC3005876	3.974	Bloomrosen, M.; Starren, J.; Lorenzi, N. M.; Ash, J. S.; Patel, V. L.; Shortiffe, E. H. <u>Anticipating and addressing the unintended consequences of health IT and golloy: a report from the AMIA 2009 Health Policy Meeting, J Am Med Inform Assoc (2011) 18:82-80.</u>	Starren
	20431360	N/A	0.963	Robinson, K. S.; Morin, P. C.; Shupe, J. A.; Izquierdo, R.; Plouz-Snyder, R.; Meyer, S.; Teresi, J. A.; Starren, J.; Shea, S.; Weinstock, R. S. <u>Use of fivree computer training methods in elderly underserved rural patients enrolled in a diabetes telemedicine program, Comput inform Nurs (2010) 28:172-177.</u>	Starren
	20377807	N/A		Wike, R. A.; Berg, R. L.; Linneman, J. G.; Peissig, P.; Blarren, J.; Ritchie, M. D.; McCarty, C. A. Quantification of the clinical modifiers impacting high-density isoprotein cholesterol in the community. Personalized Medicine Research Project Prev Cardiol (2010) 13:63-68.	Starren
	20190064	PMC3000788	3.974	Palmas, W.; Shee, S.; Starren, J.; Teresi, J. A.; Ganz, M. L.; Burton, T. M.; Pashoe, C. L.; Blustein, J.; Field, L.; Morin, P. C.; Izquierdo, R. E.; Silver, S.; Elmidice, J. P.; Landgue, R. A.; Weinstock, R. S. <u>Medicare payments</u> , healthcare service use, and selemedicine implementation costs in a randomized trial comparing betweedcline case management with usual care in medically underserved participants with diabetes melitus (IDEATel), J Am Med Inform Assoc (2010) 17:186-202.	Starren
	19955195	N/A		Williams, S. L.; Wang, L.; Kane, S. A.; Lee, T. C.; Weissgold, D. J.; Berrocal, A. M.; Rabinowitz, D.; Starmen, J.; Flynn, J. T.; Chiang, M. F. Selemedical diagnosis of retinopathy of prematurity. accuracy of expert versus non-expert gradem, Br J Ophthelmol (2010) 94:351-356.	Starren Williams
	19840720	PMC2765401	1.07	Chiang, M. F.; Geiman, R.; Martinez-Perez, M. E.; Du, Y. E.; Casper, D. S.; Currie, L. M.; Shah, P. D.; Starren, J.; Flynn, J. T. Image enables for retinopaths of prematurity diagnosis. J AAPOS (2009) 13:438-445.	Starren Shah
	19774354	N/A		Lee, J. Y; Du, Y. E; Coki, O; Flynn, J. T; Stamen, J; Chiang, M. F. Parental perceptions toward digital imaging and telemedicine for retinopathy of prematurity management, Greeke Arch Clin Exp Ophthalmol (2010) 248:141-147.	Starren
	19965742	PMC2760626		Richter, G. M.; Williams, S. L.; Starren, J.; Flynn, J. T.; Chlang, M. F. <u>Telemedicine for retinopaths of prematurity diagnosis: evaluation and challenges</u> , Surv Optimismo (2009) 54:671-685.	Starren Williams
	19620023	PMC2757535	3.126	Lai, A. M., Kaufman, D. R.; Starren, J., Shee, S. Evaluation of a remote training approach for teaching seriors to use a telehealth system. Int J Med Inform (2009) 78:732-744.	Starren
	19550198	PMC2884382	2.338	Bernstam, E. V.; Hersh, W. R.; Johnson, S. B.; Chute, C. G.; Nguyen, H.; Sim, I.; Nahm, M.; Weiner, M. G.; Miller, P.; DiLaura, R. P.; Overcash, M.; Lehmann, H. P.; Sichmann, D.; Athey, B. D.; Schouermann, R. H.; Anderson, N.; Blamm, J.; Harris, P. A.; Shim, J. W.; Bartour, E.; Silvenstein, J. C.; Krusch, D. A.; Nagarajan, R.; Becich, M. J. Synergies and districtions between computational disciplines in biomedical research, perspective from the Clinical and Translational Science Award programs. Acad Med (2009) 84:964-970.	Starren Smith

#### Feinberg Publications and Abstracts Site Preventive Medicine Overview 259 publications. Publication Listing from 03/31/2010 to 03/31/2011 PubMed ID PMC ID Impact Publications Lane, J. C.; Warady, B. A.; Feneberg, R.; Majkowski, N. L.; Watson, A. R.; Fischbach, M.; Kang, H. G.; Bonzel, K. E.; Simkova, E.; Stefanidis, C. J.; · 20430942 PMC2879316 4.844 Klaus, G.; Alexander, S. R.; Ekim, M.; Bilge, I.; Schaefer, F. Relapsing peritonits in children who undergo chronic peritoneal dialysis: a prospective study of the international pediatric peritonitis registry Clin J Am Soc Nephrol (2010) 5:1041-1046. Kang Lin, S. X; Carnethon, M.; Szkio, M.; Bertoni, A. Raciallethnic differences in the association of triglycerides with other metabolic syndrome - 20958206 N/A components: the Multi-Ethnic Study of Atheroscierosis Metab Syndr Relat Disord (2011) 9:35-40 Zhu, N.; Suarez-Lopez, J. R.; Sidney, S.; Sternfeld, B.; Schreiner, P. J.; Carmethon, M. R.; Lewis, C. E.; Crow, R. S.; Bouchard, C.; Haskell, W. L.; 20639723 PMC2891874 Jacobs, D. R. Jr Longitudinal examination of age-predicted symptom-limited exercise maximum HR. Med Sci Sports Exerc (2010) 42:1519-1527. Palaniappan, L. P.; Araneta, M. R.; Assimes, T. L.; Barreti-Connor, E. L.; Carmethon, M. R.; Criqui, M. H.; Fung, G. L.; Narayan, K. M.; Patel, H.; 14.816 20733105 N/A Taylor-Pilae, R. E.; Wilson, P. W.; Wong, N. D. Call to action: cardiovascular disease in Asian Americans: a science advisory from the American Heart Camerhon Association Circulation (2010) 122:1242-1252. Biggs, M. L.; Mukamal, K. J.; Luchsinger, J. A.; br. J. H.; Carnethon, M. R.; Newman, A. B.; de Boer, I. H.; Strotneyer, E. S.; Mozaffarian, D.; 20571017 PMC3047456 28.899 Carnethon Siscovick, D. S. Association between adiposity in midlife and older age and risk of diabetes in older adults, JAMA (2010) 303:2504-2512. Dipusse, L.; Kamineni, A.; Nelson, T. L.; Carnethon, M.; Mozaffarlan, D.; Siscovick, D.; Mukamal, K. J. Egg. consumption and risk of type 2 diabetes in Carnethon 20534749 PMC2904037 6.307 older adults Am J Clin Nutr (2010) 92:422-427. Murray, E. T.; Diez Roux, A. V.; Carmethon, M.; Lutsey, P. L.; Ni, H.; O'Meara, E. S. Trajectories of neighborhood poverty and associations with subclinical atherosclerosis and associated risk factors: the multi-ethnic study of atherosclerosis. Am J Epidemiol (2010) 171:1099-1108. 20423931 PMC2877469 5.589 Mann, D. M.; Bertoni, A. G.; Shimbo, D.; Carmethon, M. R.; Chen, H.; Jenny, N. S.; Muntner, P. Comparative validity of 3 diabetes mellitus risk 20375194 PMC2877477 5.589 Carnethon prediction scoring models in a multiethnic US cohort: the Multi-Ethnic Study of Atheroscierosis, Am J Epidemiol (2010) 171:980-988. Bertoni, A. G.; Burke, G. L.; Owusu, J. A.; Camethon, M. R.; Vaidya, D.; Bair, R. G.; Jenny, N. S.; Ouyang, P.; Rotter, J. I. Inflammation and the 20097779 PMC2845031 6.718 incidence of type 2 diabetes: the Multi-Ethnic Study of Atheroscierosis (MESA), Diabetes Care (2010) 33:804-810. Camethon, M. R. Physical Activity and Cardiovascular Disease: How Much is Enough? Am J Lifestyle Med (2009) 3:445-495. Carnethon 20419076 PMC2857374 Camethon, M. R.: Evans, N. S.: Church, T. S.: Lewis, C. E.: Schreiner, P. J.: Jacobs, D. R. Jr. Sternfeld, B.: Sidney, S.: Joint associations of physical 20516395 PMC2909350 6.614 activity and serobic fitness on the development of incident hypertension, coronary artery risk development in young adults, Hypertension (2010) 56:49-55 Camethon, M. R.; Biggs, M. L.; Barciley, J.; Kuller, L. H.; Mozafforian, D.; Mukamal, K.; Smith, N. L.; Siscovick, D. <u>Diabetes and coronary heart</u> disease as risk factors for mortality in cicker adults. Am J Med (2010) 123:556:e1-556.e9. 20569763

#### Feinberg Publications and Abstracts Site

#### Impact Factor Listing

Journal rankings for the most recent ranking period (2009) were used in this analysis. Only publications from 2010 are included. There were a total of 1702 publications during this period, with 455 high impact publications out of 1381 publications with impact factors listed, and 316 publications from yournals without 151 listed impact factors or for which ISI and PubMed list the journals differently.

Please keep in mind that the size of the field and patterns of publication are very important when interpreting Impact Factors - the. See this Wicipedia article for more information: <u>About Impact Factors</u>. The Article Influence Score might be a better way to rank the publications. See this Wicipedia article for more information: <u>About Eigenfactor and Article Influence Score</u>.

Click on a heading to re-sort

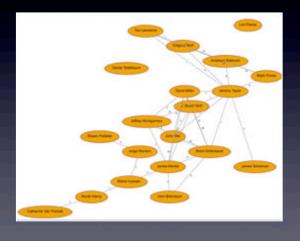
100	C. C	Eastelly, Pulls	2000	Total Cites (2009)	Total Articles (2009)	Impact Factor	Impact Factor (5 year)	Immediacy Index	Eigenfactor	Influence Score
-	Journal	-	DESN	Account	140	***		44.000	0.67555	40.000
	N Engl J Med		0028-4793	216752	352	47.05	51.41	14.557	0.67236	19.868
5 1	Nature		0028-0836	483039	866	34.48	32.906	8.209	1.74605	18.062
3 1	Nat Genet	5	1061-4036	69988	209	34.284	29.768	8.411	0.33184	15.586
4 9	Cell	3	0092-8674	153972	359	31,152	32.628	6.825	0.69859	20.124
5 ;	Science	5	0036-8075	644643	897	29.747	31.052	6.531	1.52308	16.58
6 1	Nat Rev Carcer	. 1	1474-175X	22298	72	29.538	34.963	5.903	0.12531	14.978
7 1	Nat Mater	1	1476-1122	24465	134	29.504	28.507	5.91	0.1993	14.314
8 ,	Jama-J Am Med Assoc	10	0096-7484	117090	234	28.899	27.753	7.038	0.3316	11,421
9 1	Nat Rev Neurosci	2	1471-003X	18553	72	26.483	29.814	4.361	0.11425	14.797
10 1	Net Nanotechnol	-1	1748-3387	6461	126	26.309	27.67	3.937	0.06108	13.65
11 9	Cancer Cell	2	1535-6108	15367	62	25.288	26.636	7.317	0.10953	12.682
12 5	Cell Stem Cell	2	1934-5909	4007	98	23.563	23.563	6.724	0.04396	14.875
13	Immunity	2	1074-7613	27330	152	20.589	19.555	4.636	0.15635	11.246
14	Chem Soc Rev	1	0306-0012	17601	223	20.086	19.963	5.314	0.07082	6.408
15	Nat Cell Biol	1	1465-7392	25557	167	19.527	19.062	4,144	0.17676	11.962
16	Lancet Neurol	1	1474-4422	6432	90	18.126	15.46	4.578	0.05185	5.701
17	2 Clin Oncol	4	0732-183X	104253	812	17.793	15.909	3.964	0.36629	4.528
18 1	Nat Methods	1	1548-7091	8697	120	16.874	16.907	4.217	0.06776	8.712
	Ann Intern Med	6	0003-4819	45184	174	16.225	16.552	4.098	0.12008	6.772
	Nat Chem Biol		1552-4450	5101	123	16.058	16.738	3.472	0.0486	8.37

# All reports are available as pdf, word or excel and fully hyperlinked

Oto	laryngology	- Head and N	leck Surg	pery Overview	
55 p	publications	. Publication	Listing fr	om 1/1/2009 to 12/31/2009	
	PubMed ID	PMC ID	Impact	Publications Stumpe, M. R.; Chandra, R. K.; Yunus, F.; Samant, S. Incidence and risk factors of	
	18853454	N/A	2.283	bisphosphonate-associated osteonecrosis of the jaws. Head Neck (2009) 31:202-206.  Chandra, R. K.; Patadia, M. O.; Raviv, J. Diagnosis of nasal airway obstruction. Otolaryngol	Chandra
	19328887	N/A	1.136	Clin North Am (2009) 42:207-25, vii.	Chandra Kato Grammer Peters Kuperman Avila Schleimer
٠.	19387032	PMC2677404		Schleimer, R. P.; Kato, A.; Peters, A.; Conley, D.; Kim, J.; Liu, M. C.; Harris, K. E.; Kuperman, D. A.; Chandra, R.; Favoreto, S. Jr; Avila, P. C.; Grammer, L. C.; Kern, R. C. Epithelium, inflammation, and immunity in the upper alrways of humans: studies in chronic rhinosinusitis. Proc Am Thorac Soc (2009) 6:288-294.	Conley Kim Chandra Kern
٠.	19401038	N/A	2.252	Pearlman, A. N.; Chandra, R. K.; Chang, D.; Conley, D. B.; Tripathi-Peters, A.; Grammer, L. C.; Schleimer, R. T.; Kern, R. C. Relationships between seventy of chronic minosinusitis and nasal polyposis, asthma, and atopy.	Grammer Schleimer Conley Chandra Kern
	19455683	N/A	1.85	Richter, C. P.; Shintani-Smith, S.; Fishman, A.; David, C.; Robinson, I.; Rau, C. Imaging of cochlear tissue with a grating interferometer and hard X-rays. Microsc Res Tech (2009) 72:902-907.	Eishman Bau Bichter

#### How to install

- Get ahold of me wakibbe@northwestern.edu
- Install as a VM
- Download from Github: https://github.com/wakibbe/LatticeGrid/



#### What is Lattice Grid?

• LatticeGrid is a modular, flexible approach to assessing collaboration patterns using institutional and public data, such as PubMed. LatticeGrid can incorporate data from a variety of sources, integrate it around organizational constructs such as centers and departments, and build models of collaboration patterns. Importantly, LatticeGrid provides flexible mechanisms for acquiring and processing these data and can consume ontological representations of annotations, enabling an automated, knowledge-based analysis of semantic content of connections between investigators and projects. The ability of LatticeGrid to define collaboration teams "on the fly" is a unique feature not found in other collaboration tools. Another unique component of LatticeGrid is that it provides multiple ways to represent physical and virtual relationships between investigators and map those organizations onto collaboration patterns between investigators.and knowledge management platforms.