Part 1: “USC Department of Preventive Medicine and Being a Journal Editor ”

Part 2: “Collaboration Between USC and BSMU”

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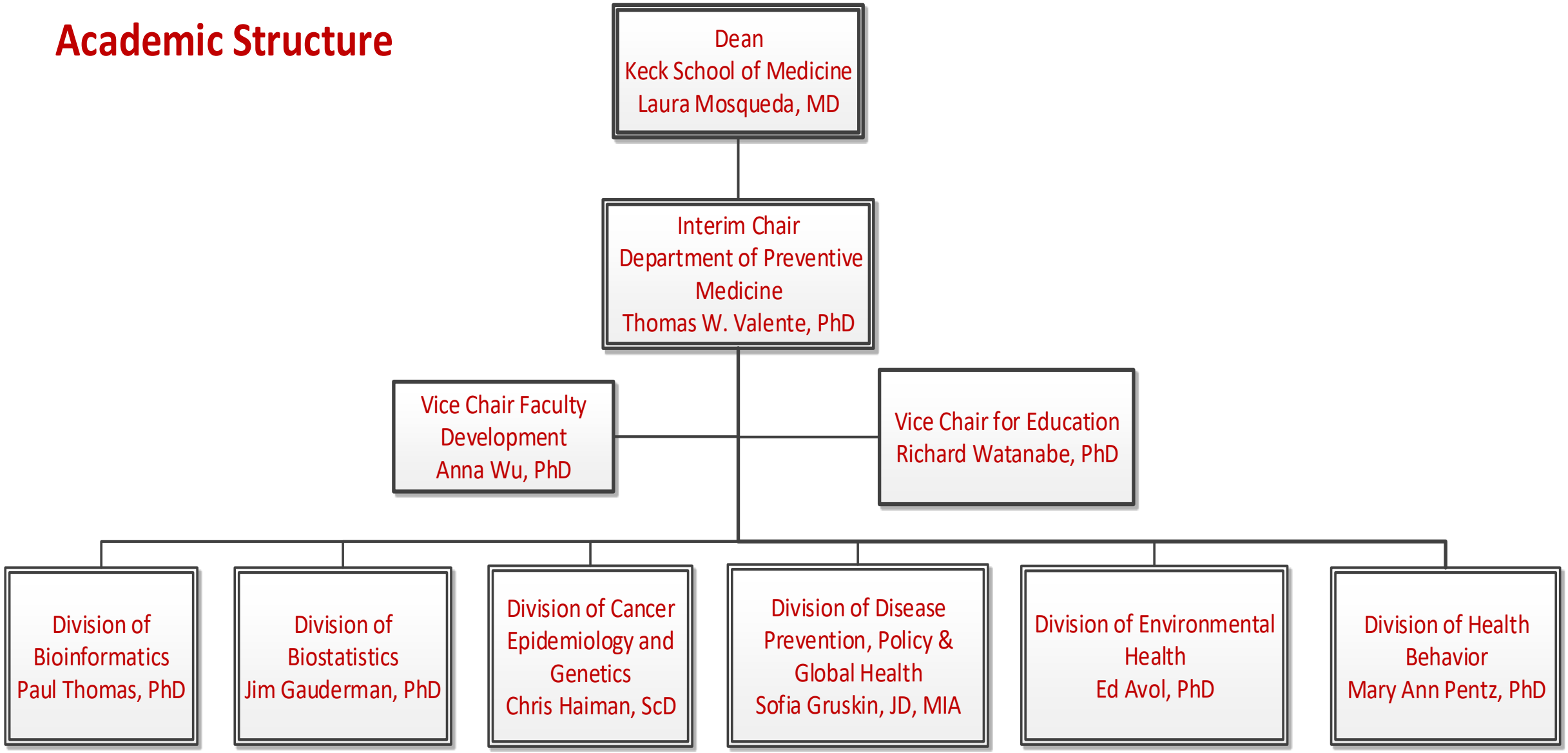
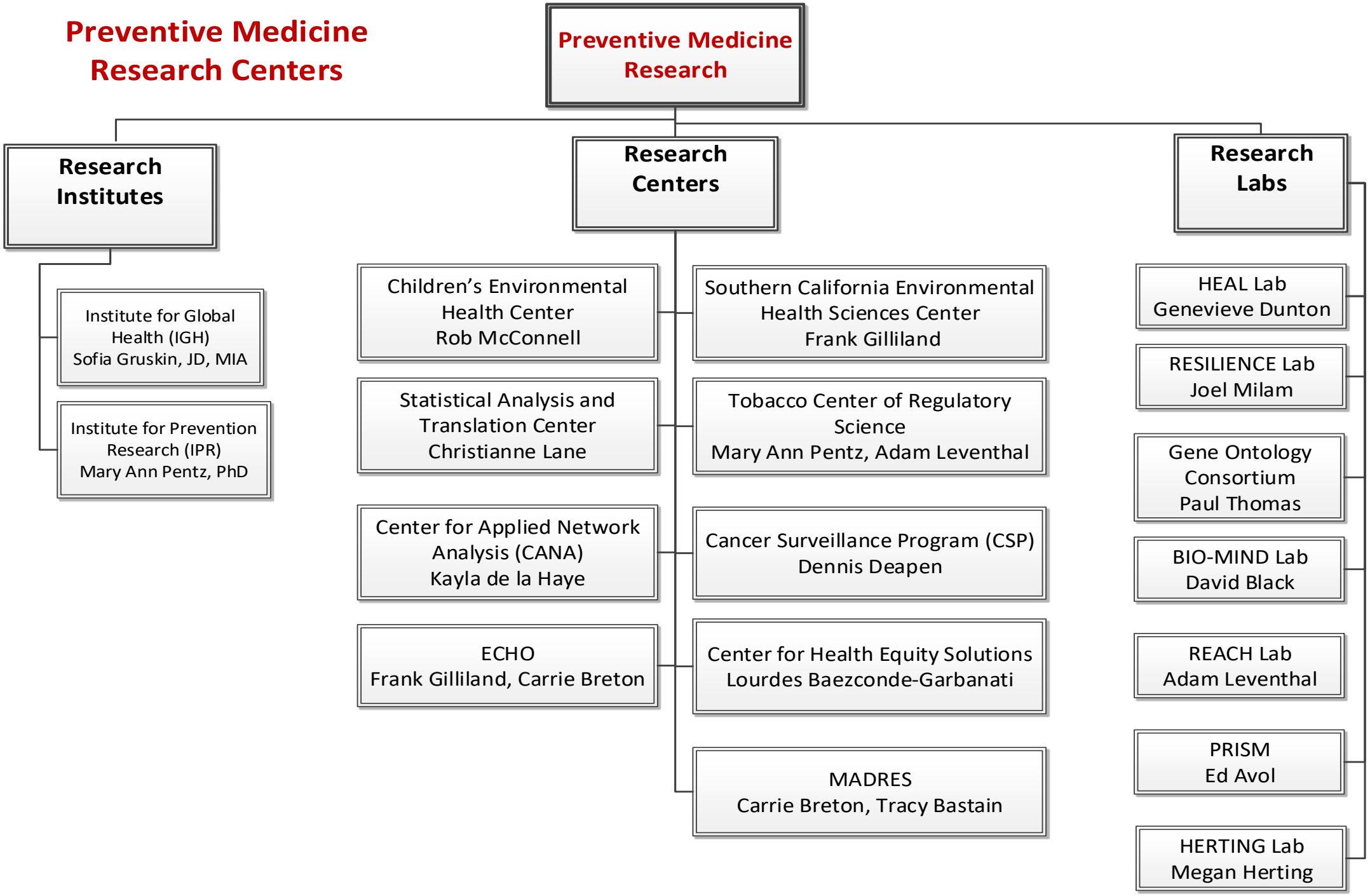
Preventive Medicine

- Preventive medicine focuses on the health of individuals, communities, and defined populations. Its goal is to protect, promote, and maintain health and well-being and to prevent disease, disability, and death.
  - Health promotion and disease prevention
- One of 24 specialties of medicine
- Since 1950, the American Board of Preventive Medicine (ABPM) has certified over 8,000 physicians as specialists in Preventive Medicine
- Approximately 40% are engaged in public health, 40% are engaged in occupational medicine, and 20% are engaged in aerospace medicine.
- Only 1% of all physicians in U.S. are specialists in Preventive Medicine
- Competency is needed in clinical and population-based medicine, epidemiology of disease, biostatistics, environmental and occupational health, evaluation of health services, and behavioral health

Preventive Medicine Academic Structure



Preventive Medicine Research Centers



Keck School of Medicine of USC
Department of Preventive Medicine
Education

Richard Watanabe
Vice Chair for Education

Kiros Berhane, Director of Graduate Programs in Biostatistics and Epidemiology

Bachelor's

- BS in Health Promotion & Disease Prevention
- BS in Global Health
  Ellie Nezami

Minor's

- Public Health Substance Abuse Prevention Health Communication
- Nutrition and Health Promotion
- Cultural Competence in Medicine
- Cinema-TV for the Health Professions
- Global Health
- Environmental Health

Masters

- MS Epidemiology & Biostatistics
  Meredith Franklin
- MS Molecular Epidemiology
  Mariana Stern
- MS Applied Biostatistics & Epidemiology
  Wendy Mack
- Master of Public Health (MPH)
  Luanne Rohrbach
- Master of Public Health (online)
  Shubha Kumar

Dual Degrees

- Master of Science in Social Entrepreneurship/MPH
- Master of Social Work/MPH
- Master of Planning/MPH
- Doctor of Philosophy in Psychology (Clinical)/MPH
- Pharm. D./MPH
- MD/MPH

PhD

- Biostatistics *Kim Siegmund*
- Epidemiology
  Roberta McKean-Cowdin
- Health Behavior Research
  Jennifer Unger

Dual Degrees

- Interdisciplinary Ph.D. in Population, Health and Place
  Lihua Liu
  Bob Vos (Spatial Sciences)

Post Doctoral

- Postdoctoral Training in Health Education & Disease Prevention Research
  Joel Milam

Editing Evaluation & the Health Professions

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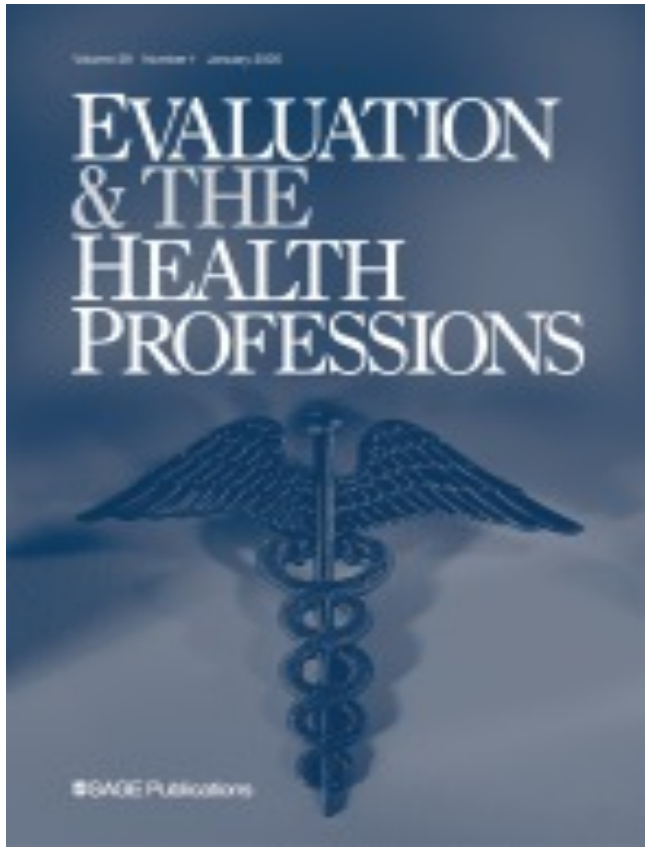

More on EHP

- EVALUATION & THE HEALTH PROFESSIONS has a 2.0 5-year impact factor, 1.6 in 2018.
- The rejection rate is about 90% now.
- It is a respected journal but in the middle of the public health, health services, healthcare type journals.
- SUBMISSIONS: Should be in EHP format, solid English, with good theoretical or novel practical justification for the study, with generalizable implications, solid methods and analysis, implications for the health professions and health research.

EHP Missions Statement

- *Evaluation & the Health Professions* is a peer-reviewed journal that provides health-related professionals with state-of-the-art methodological, measurement, and statistical protocols or tools for conceptualizing the etiology of health promotion and problems, and developing, implementing, and evaluating health programs, teaching and training services, and products that pertain to a myriad of health dimensions. It is designed to provide a forum for keeping health professionals abreast of the latest technological advances in evaluation research methods as well as provide the results of important evaluations. Further, the Journal is designed to provide a forum for debate of timely evaluation issues in health research and evaluation more broadly, of important to the health professions.

Let me follow you through a hypothetical submission

- First, I log into SAGETRACK (A SCHOLARONE SYSTEM). I go into my administrative portal.
- I check for new submissions.
- Manuscript submitted: "Reliability and validity of a patient physical activity assessment scale for nursing".
- Is the submitted file anonymous? Yes good
- Is the manuscript in EHP formatting, which is of a social science-type (also tables and figures should be at the end of the manuscript)? Yes good
- How many pages is it? I can only fit 512 pages of manuscripts per year in the journal, about 32 articles.
  - This manuscript is 50 text pages long! Too long for the content…
- Next, I read the Abstract. Is this a fit for the journal? (Novel, solid evaluation? Relevant to the health professions?)
  - This study involves using an established measure replicated in yet a new country…not be particularly novel.
  - The sample size is not that large, n=200; from one hospital, so may not generalize.
  - There is only establishment of internal consistency, content validity, and replication of scale factors; no convergent, discriminant validity, or predictive validity.
    - This is just a scale for which its parts fit together as the authors intended.

  - REJECT IN-HOUSE—NOT SENT OUT FOR FORMAL REVIEW

New scenario

- Let’s say this manuscript has a sample size of 1000. It was completed at three hospitals in multiple cities in the country.
- The measure was expanded to include accidental injuries related to patient physical activity that may be of concern to nurses.
- An established measure is used as a comparison on physical activity.
- The English is okay on this manuscript so reviewers will not be cruel.
- This new manuscript could go out for review.

Searching for reviewers

- First ,I look for reviewers who are experts in nursing or physical activity from my Editorial Board. I ask that person to review.

- Next, I look at the References (ah good they are recent references, 2015, not back from the early 1990s). I search for reviewers from the Reference section.

- I invite up to five reviewers, trying to get at least two to be willing to do a review. Okay, I have the reviewers..

30 days later

- The reviews came in. I permit up to but no more than 90 days for a review. (I hope to get them in 30 days.
- One reviewer recommended a major revision/rejection. The Introduction does not really justify well why this study is being done.
- The other reviewer recommends a major revision. This reviewer mentions that changes are needed but views the content as relatively novel.
- I read through the article quickly… knowing that I have 30 manuscripts to be on top of, and this is my side job…
  - I see that there is no theory mentioned but there is a hunch that physical activity done without very close nursing supervision within a hospital setting can lead to accidents. What is the novelty in that?
  - Should I send the article back to the authors and have them revise it or just reject it?

Part 2: Slides just serve as back up to Questions and Answers

Part 2: The Division of Health Behavior Research Focuses on Health Practices

- Not smoking
- Drinking alcohol modestly
- Not eating too much
- Eating breakfast
- Not becoming overweight
- Exercising
- Sleeping sufficiently

- Accident avoidance
- Good hygiene
- Stress monitoring
- Safe sex
- Non-exposure to environmental hazards
- Avoiding other addictions
- Adaptive coping
- Adjustment to disease
- Compliance with treatment

Health behaviors are not totally understood

- When is “unhealthy” behavior safe? (safe level of alcohol or tobacco use, safe frequency of getting drunk)
- Healthy ideologies are not always safe (too much exercise, safety gates for infants as a danger for adults, 8 hours is too much for “short” sleepers)
- Risk factors change (cell phones used to be protective on the road, but now they are dangerous, as a function of number of users)
- Definitional problems (What is a disease? Are some people diseased or just different? We group lots of disadvantaged group together that are very different from each other—why?)
- Creating categories out of continua (e.g., loss of control may really vary continuously among drug users but people are categorized as drug user/abuser)

Why focus on health?

- SELF: body, mind, spirit

- Maximize functional capacity (able to do more)
- Think more clearly, feel better (able to do better)
- Protection from illness (resistance)
- “Closer” to the center of life (spiritual)

- OTHERS: inter-connectedness, social responsibility

- Societal health costs are lower ($-medical care)
- Better for the economy (maximum productivity)
- Minimize - effects on others (worry, care-taking)

What sorts of collaborative manuscripts might we work on?

Examples—Publications of USC with BSU/BSMU:
17 publications and counting (Cohort #1-6, Cohort#2-2, Cohort#3-6)

1. Sussman, S., Gufranova, U., & Demin, A. (2007). Speculation about options for teen tobacco use cessation in the Russian Federation. *Tobacco Induced Diseases, 3*(3), 1-15.

- This paper summarized prevalence and consequences, recent policies, prevention and cessation efforts, developmental work (focus groups), and speculation about the status of cigarette smoking in the Russian Federation in 2007. Unique aspects of modern Russian society were suggested as leading to relatively high prevalence of smoking among Russian males.
  - Policy needs included raising prices of tobacco products, enforcement of no tobacco use policies among minors, ratification of the Framework Convention on Tobacco Control (FCTC) and implementation of evidenced-based tobacco use prevention and cessation programs.
    - Several of these goals have been achieved since then.

Demin’s Focus Group Findings: Examples

- Youth knowledge on risks of tobacco use is poor. There are a lot of myths, for example: "One develops cancer of the lip if does not inhale smoke.“
- Social influence and control of negative emotions (school and home stress) dominated reasons for youth tobacco use among, compared to pleasure, empowering, or dependence.
- Young smokers concealed their smoking from parents.
- Young smokers attempted quit smoking, but most failed.
- Smoking accompanied alcohol intake during leisure time spent with peers.
- Some children relieved school stress by smoking during breaks.
- Smoking was not viewed as not compatible with sports.
- Youth believed smoking compromises memory, intellect and school performance.
- Youth held a view that adults can influence smoking among younger children. Among high school students peer influence is the key.
- Opinion that a girlfriend or a boyfriend may be a smoker, but not future husband or wife, so future child not be compromised.

2. Akhmadeeva, L., Andreeva, V.A.,. Sussman, S., Husnutdinova, Z., & Simons-Morton, B.G. (2008).Need and possibilities for seat belt use promotion in Bashkortostan, Russia. *Evaluation & the Health Professions, 31*(3), 282-289, 2008.

- The prevalence of seat belt use is low, which may account in part for the very high rate of motor-vehicle-related mortality in Bashkortostan. The authors discuss the need and potential for translating seat belt promotion programming from other Russian regions and other countries to Bashkortostan. **The authors conclude that current policies developed in other countries could work well in the republic, if they are enforced.** Meanwhile, initiatives such as the Sakhalin Road Safety Partnership was considered to offer great potential for translation in Bashkortostan as well as in other regions with similarly low seat belt use prevalence.

3. Gunning, M., Sussman, S., Rohrbach, L.A., , Kniazev, V., & Masagutov, R. Concurrent predictors of cigarette and alcohol use among Russian and US adolescents. *Journal of Drug Education, 39*(4), 385-400, 2009.[first Russia teen cohort; A-1]

- Correlates were explored of 30-day cigarette and alcohol use among two samples of high school students, one in the Russian Federation (n = 362), and one in the United States (n = 965). Overall, correlates from each of the types of influence were significant predictors of substance use in both samples. **The most consistent predictors of cigarette and alcohol use across countries were friends' substance use and sensation seeking behavior. Perceived harmfulness of drug use was negatively associated with cigarette and alcohol use in both samples.** **Having a substance abuser in one's family was negatively associated with alcohol use in the Russian sample, but positively associated with alcohol use in the U.S. sample.** In general similar patterns of relationships between predictors and substance use were seen across both countries.

Table 1: Demographics of the Russian and U.S. samples

	US (N=965)	Russian (N=362)
Age Mean (SD)	15.1 (0.93)	15.7 (0.75)
Female %	49	55
Parents' % < college education	72	32
Ethnicity	% Asian American-3 % Hispanic-40 % African American-5 % Non-Hispanic White-31 % American Indian-2 % Mixed-17 % Other-3	% Bashkir-9 % Tatar-31 %Slavic Russian-38 % Mixed-18 % Other-4
Cigarette use % past 30-day use	16	36
Alcohol use % past 30-day use	43	47
Marijuana use % past 30-day use	26	8
Hard drug use % past 30-day use	14	6

Table 2: Gender differences in substance use across samples

	Russian sample (N=362)		US sample (N=965)	
	Male	Female	Male	Female
% Cigarette use	44_a	29_b	18_a	14_a
% Alcohol use	49_a	45_a	40_a	46_a
% Marijuana use	13_a	4_b	30_a	21_b
% Hard drug use	11_a	2_b	15_a	13_a

- Note. % drug use indicates past-30 day use. Same letter subscript across the row within a sample indicates no significant gender difference at $P \leq 0.05$ (two-tail).

4. Sussman, S., Gunning, M., Lisha, N.E., Rohrbach, L.A., . Kniazev, V. Concurrent predictors of drug use consequences among U.S. and Russian adolescents. *Salud y Drogas, 9*(2), 129-148, 2009. A-2

- Correlates were explored of drug use-consequences related variables (addiction concern, problem consequences, and drinking alcohol/using drugs while driving) among the same two samples of high school students. **The most consistent predictors of consequences across countries were depression, perceived harmfulness of drug use, family substance abuser, friends' substance use, and last 30-day cigarette use.** These results suggest that the Theory of Triadic Influence is relevant to both countries. We speculate that drug prevention efforts may share common features among some U.S. and Russian youth populations.

5. Pokhrel, P., Sussman, S., Sun, P., Kniazev, V., & Masagutov, R. Social self-control, sensation-seeking, and substance use in samples of U.S. and Russian adolescents. *American Journal of Health Behavior, 34*(3), 374-384, 2010. A-3

- We compared the relations of social self-control and sensation seeking with substance use across the two samples of U.S. and Russian adolescents (same cohort). **Lack of social self-control was significantly related with higher alcohol and hard drug use in the Russian sample and higher cigarette use in the U.S. sample. Higher sensation-seeking showed significant associations with higher cigarette and alcohol use in the Russian sample and higher alcohol, marijuana, and hard drug use in the U.S. sample.** As with U.S. adolescents, prevention programs for Russian adolescents may also benefit from being tailored to higher sensation-seekers and including self-control skills training.

6. Sussman, S., Sun, P., Gunning, M., Moran, M.B., Pokhrel, P., Rohrbach, L.A., Kniazer, V., & Masagutov, R. Peer group self-identification in samples of Russian and U.S. Adolescents. *Journal of Drug Education, 40*(2), 203-215, 2010. A-4

- Most peer group self-identification research has been conducted in the U.S. This paper examined the generalizability of self-identified group name research using the same two samples. Y**outh who self-identify as a High Risk Youth are relatively likely to use drugs, show greater concern about becoming an addict, report a greater sensation seeking preference, higher levels of depression and report poorer school performance**.

7.Pokhrel, P., Sussman, S., Regmi, S., Hallem, J., Knaizev, V., & Masagutov, R. Spirituality and substance use in a sample of Russian adolescents. *International Journal of Adolescent Medicine and Health, 24*(2), 149-152, 2012. A-5

- This study examined only the sample of 362 Russian adolescents. Adolescents scoring higher on spirituality were significantly more likely to report lower levels of intentions to use cigarettes or alcohol. However, spirituality was not associated with recent cigarette/alcohol use or perceived risks. Analyzed separately for ethnic Russians and non-Russians, the relationship between spirituality and intentions were significant only among ethnic non-Russians.
  - The data suggests that **the protective effects of spirituality on substance use may not be universal and may depend on subjects ' national, ethnic, or religious background**.

- 8.Pokhrel, P., Masagutov, R., Kniazev, V., & Sussman, S. Health-as-a-value, spirituality, and cigarette and alcohol use among Russian high school students. *Journal of Primary Prevention 33*(5/6), 239-248, 2012. A-6

- We tested whether spirituality and heath-as a-value had protective effects on past-month cigarette and alcohol use behaviors and next-year cigarette and alcohol use intentions among only this sample of Russian high school students, after controlling for known predictors of adolescent substance use such as age, gender, socioeconomic status, peer substance use, and sensation seeking. **We found a significant inverse relationship between health-as a-value and recent cigarette and alcohol use as well as future cigarette use intentions. However, we did not find a significant relationship between spirituality and any substance use variables.**

- 9.Sussman, S. International translation of Project EX: A teen tobacco use cessation program. *SUCHT 58*(5), 317-325, 2012. [second sample of Russian teens at summer recreational camps; B-1]

- Project EX is an evidence-based program teen tobacco use cessation program. This paper provided a snapshot of progress on international translation of Project EX pilot study work in eight countries that have been approached thus far. The program was implemented in Wuhan, China; Israel and partners; Bashkortostan, Russia; and Elche, Spain. Implementation is planned for Vienna, Austria; Mumbai, India; and Bangkok, Thailand.
    - Convenience samples were recruited based on previous contacts with each location. A protocol was sent to each location, proposing a controlled design, in which subjects enter cessation groups or become a wait-list control, with an immediate pretest, posttest, and 3-month follow-up.
        - Language translation of program materials was completed in seven of the eight locations.
        - Several variations in design and implementation were needed. For example, youth fear of reporting tobacco publicly mandated to researchers that the prevention/cessation classroom version be implemented in some locations (Israel and partners, and India). Program effects were indicated across countries.

- 10.Idrisov, B., Sun, P., Akmadeeva, L., Arpawong, T.E., Kukhareva, P., & Sussman, S. Immediate and six-month effects of Project EX Russia: A smoking cessation intervention pilot program. *Addictive Behaviors, 38*(8), 2402-2408, 2013. B-2

- This study evaluates the performance of the Project EX tobacco use cessation program in Russian summer recreational camps. An eight-session clinic-based tobacco use cessation program for adolescents was tested during the summer of 2011 in an experimental pilot trial that involved different youth that rotated through camps. Conditions were nested within camps. Two rotations of unique subject groups of smokers (program and standard care control) through each of five camps provided the means of controlling for campsite by condition. Assignment of condition by rotation was random (by a flip of a coin), achieving reasonable baseline comparability (total n = 164 smokers at baseline, 76 program group, 88 standard care control group). Project EX was moderately well-received. **At the six-month follow-up, program subjects reported a higher intent-to-treat quit rate during the last 30 days (7.5% versus 0.1%, p<.05).** For the subjects who remained monthly smokers at the six-month follow-up, Project EX reduced subjects' level of nicotine dependence (−0.53 versus+0.15, p <.001).

- 11.Kong, G., Idrisov, B., Galimov, A., Masagutov, R., & Sussman, S. Electronic cigarette use among youth in the Russian Federation. *Substance Use & Misuse*, *52*(3), 332-339, 2017. [third sample of Russian teens; C-1]

- We examined prevalence of and factors associated with youth e-cigarette use in the Russian Federation.
- A cross-sectional, anonymous survey was conducted among a new sample of 716 high school students in three cities (i.e., Ufa, Sterlitamak, Karagaevo) within the Republic of Bashkortostan, Russian Federation in 2015 (51% female; mean age=16.27).
- Lifetime use of e-cigarettes was 28.6% and past-30-day use was 2.2%.
- **Multilevel modeling showed that belonging to Tatar/Bashkir ethnicity relative to Russian ethnicity (OR = 1.60) and lifetime use of cigarettes (OR = 21.64), hookah (OR = 4.21), and alcohol (OR = 1.90) was associated with greater odds of lifetime use of e-cigarettes.**
- Use of social support coping strategies (i.e., utilizing parents for support) were associated with lower odds of lifetime use of e-cigarettes (OR = 0.94).
- Despite high lifetime e-cigarette use, **past-30-day use was low**.

- 12.Galimov, A., El Shahawy, O., Unger, J.B., Masagutov, R., & Sussman, S. Hookah use among Russian adolescents: Prevalence and correlates. *Addictive Behaviors, 90*, 258-264, 2019. C-2

- This cross-sectional study was conducted with this same new sample from the three areas of Bashkortostan, Russia; 34.92% and 9.36% were lifetime and last 30-day hookah users, respectively.
- Lifetime hookah use was associated with older age (OR=1.29), higher anger coping (OR=1.41), school troubles (OR=2.30), lifetime cigarette (OR=1.59), e-cigarette (OR=4.62), alcohol (OR=5.61), and marijuana use (OR=8.05).
- Past 30-day hookah use was associated with older age (OR=1.71), lifetime use of alcohol (OR=5.39), school troubles (OR=5.82), and anger coping strategies (OR=1.40).
- **Hookah use is currently high among Russian youth in Bashkortostan and is associated with other risky behaviors.**

- 13.Tsai, J., Y., Huh, J., Idrisov, B., Galimov, A., Espada, J.P., Gonzalvez, M.T., & Sussman, S. Prevalence and co-occurrence of addictive behaviors among Russian and Spanish youth: A replication study. *Journal of Drug Education, 46*(1-2), 32-46, 2016. C-3

- Latent class analysis explored addiction subgroups among this new sample of adolescents in Russia and also Spain (average age=14.9; n=811). Last 30-day prevalence of one or more of 11 addictions reviewed in the previous work was the primary focus (i.e., cigarettes, alcohol, hard drugs, eating, gambling, Internet, love, sex, exercise, work, and shopping).
  - Results confirmed a two-class model (addicted class and non-addicted class) among both Russian and Spanish adolescents.
  - The mean number of addictions reported was 1.39 (SD=1.78) addictions among Russian youth and 1.56 (SD=1.68) addictions among Spanish youth.
  - The prevalence of the sample that constituted the ‘‘addicted group’’ in Russia and Spain was 32.2% and 28.6%, respectively.
  - **The most prevalent addictions (i.e., love, Internet, exercise) were similar.**

- Similar to findings previously reported for a U.S. sample.

- 14. Pokhrel, P., Bennett, B.L., Regmi, S., Idrisov, B., Galimov, A., Akhmadeeva, L., & Sussman, S. Individualism-collectivism, social self-control and adolescent substance use and risky sexual behavior. *Substance Use & Misuse, 53*(7), 1057-1067, 2018. C-4

- Using this new, third sample of Russian teens, this study tested a new model explaining the relationship between cultural orientation (i.e., individualism, collectivism) and adolescent problem behavior (i.e., substance use and risky sex) in terms of interpersonal self-regulation (i.e., social self-control).
- Using path analysis we found that in addition to having direct effects, higher individualism indirectly affected substance use and risky sexual behavior through social self-control and negative life events. Higher collectivism was found to have a direct protective effect on risky sexual behavior and a direct effect on social self-control. However, collectivism was not found to have indirect effects on substance use or risky sexual behavior.
- **Higher individualism appears to function as a risk factor for adolescent problem behavior and this relationship may be mediated by lower social self-control.**

- 15. Prokhorov, A.V., Khalil, G.E., Foster, D.W., Marani, S.K., Guindani , M., Espada, J.P., Gonzalvez, M.T., Idrisov, B., Galimov, A., Arora, M., Tewari, A., Isralowitz, R., Lapvongwatana, P., Chansatitporn, N., Chen, X., Zheng, H., & Sussman, S. Testing the nicotine dependence measure mFTQ for adolescent smokers: A multinational investigation. *The American Journal on Addictions, 26*(7), 689-696, 2017. C-5

- As a measure of nicotine dependence among adolescent smokers, the modified Fagerstrom Tolerance Questionnaire (mFTQ; seven items), has been successfully used in the United States (USA). This study was the first to test the validity and reliability of mFTQ in four countries: Thailand, Spain, the USA, and Russia.
- In a cross-sectional survey, mFTQ, risk factors of nicotine dependence, and sociodemographic characteristics were assessed. Risk factors included age of first cigarette, frequency of alcohol use, frequency of marijuana use, and number of cigarettes smoked yesterday. Salivary cotinine was also obtained in Thailand and Spain.
- For all four countries, mFTQ exhibited a single factor structure, as supported by previous work in the USA. For all studied countries except Thailand, mFTQ presented acceptable internal reliability.
- Risk factors of nicotine dependence predicted mFTQ scores across countries. mFTQ is a single-factor measure of nicotine dependence that shows acceptable internal consistency and validity across countries.

- 16.Galimov, A., Steinberg, J., Unger, J.B., Cruz, T.B., Idrisov, B., Baezconde-Garbanati, L., Masagutov, R., & Sussman, S. No-smoking policy in Russia: Awareness and perceptions among Bashkortostan adolescents. *Current Addiction Reports, 5*(1), 1-9, 2018. C-6

- This study described adolescents' knowledge and endorsement of tobacco policies in the Russian Federation.
- The Russian Federation has enacted several smoke-free policies that may reduce exposure to second-hand smoke.
- Among the same sample of 716 high school students surveyed, over 90% correctly understood the smoke-free rules in public places, school, apartment hallways and elevators, and public transportation. However, only 24% understood that there were no such rules currently applied inside apartments.
- Approximately 40% witnessed non-compliance in public places and school and 61% in apartment stairs and elevators. The highest compliance was observed in public transportation (85%).
- Two thirds of 57 recent smokers had violated one of these policies. Adolescents disciplined or suspended from school were more likely to be noncompliant with no smoking policies.

- 17.Galimov, A., Hanewinkel, R., Hansen, J., Unger, J.B., Sussman, S., & Morgenstern, M. Energy drink consumption among German adolescents: Prevalence, correlates, and predictors of initiation. Appetite, 139, 172-179, 2019.

- This study examined the prevalence and correlates of energy drinks (ED) use as well as initiation rates and predictors among German adolescents over a one-year period.
- A school-based longitudinal study of 6902 adolescents ages 9–19 years was conducted in 44 schools in six Federal states of Germany in 2016–2018.
- Lifetime ED use was reported by 61.7% of the participants, while 21.4% reported past 30-day use.
- In two multilevel models, lifetime and past 30-day ED use were positively associated with male sex, older age, drug use, poor dietary habits, higher BMI, sensation seeking, worse school performance, and more frequent ad exposure ($p < .01$).
- One quarter of the non-users initiated ED use in 12 months. ED initiation was positively associated with male sex, greater sensation seeking traits, more frequent ED ad exposure, and curiosity about trying EDs, while inversely associated with better school performance and attending a gymnasium-type school.