Statement of

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and

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The National Academies of Sciences, Engineering, and Medicine

before the
U.S. House Of Representatives’ Committee on Science, Space, and Technology

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My name is David B. Allison. I currently serve as the dean of the School of Public Health at Indiana University – Bloomington, although on this occasion I am speaking as a member of the Committee on Reproducibility and Replicability in Science and on behalf of the National Academies of Sciences, Engineering, and Medicine (the National Academies) and not Indiana University. I have been asked by The U.S. House of Representatives’ Committee on Science, Space, and Technology to testify at their hearing titled, “Strengthening Transparency or Silencing Science? The Future of Science in EPA Rulemaking” on November 13, 2019. I understand from the invitation that “The purpose of the hearing is to assess the EPA’s proposed rule Strengthening Transparency in Regulatory Science.”

In my testimony, I have been asked to address the following topics:

- The definition of reproducibility, as determined by the Committee on Reproducibility and Replicability in Science of the National Academies;
- The potential consequences of EPA’s goal to establish a reproducibility standard within its regulatory process by requiring that the underlying data of scientific studies be made available;
- Whether it is appropriate to determine the rigor or regulatory applicability of a study based solely on its reproducibility; and
- Whether a reproducibility requirement could increase the risk that sound science could be excluded from EPA environmental and public health regulations.

These topics will be addressed in addition to several other points. In this testimony, I will provide:

1. A brief background on the Committee on Reproducibility and Replicability in Science and my involvement in it.
2. Some overview remarks about science found in the “Reproducibility and Replicability in Science” report as well as my own personal perspectives that serve as context for this discussion.
3. Responses to the topics posed by the House Science committee.
4. A copy of the Executive Summary of the "Reproducibility and Replicability in Science" report.

My testimony ends with a summary of its main points which are my own personal perspectives.

1. **A brief background on the Committee on Reproducibility and Replicability in Science and my involvement in it.**

The American Innovation and Competitiveness Act of 2017 directed the National Science Foundation to engage the National Academies in a study to assess reproducibility and replicability in scientific and engineering research and to provide findings and recommendations for improving rigor and transparency in scientific research. The National Academies appointed a committee of experts to carry out this evaluation, representing a wide range of expertise and backgrounds: methodology and statistics, history and philosophy of science, science communication, behavioral and social sciences (including experts in the social and behavioral factors that influence the reproducibility and replicability of research results), earth and life sciences, physical sciences, computational science, engineering, academic leadership, journal editors, and industry expertise in quality control. In addition, individuals with expertise pertaining to reproducibility and replicability of research results across a variety of fields were selected. Dr. Harvey Fineberg, President of the Gordon and Betty Moore Foundation and a past president of the Institute of Medicine—now the National Academy of Medicine—served as the
chair of the Committee. The Committee’s report is available for download without charge at: https://www.nap.edu/catalog/25303/reproducibility-and-replicability-in-science.

I was asked to serve as a committee member based on my work as a scientist and my long-term interest in issues related to reproducibility, replicability, and rigor in science such as my involvement in organizing and participation in the 2017 National Academy of Sciences Colloquium which was focused on these issues. My research interests include obesity and nutrition, quantitative genetics, clinical trials, statistical and research methodology, and research rigor and integrity. I have authored more than 600 scientific publications and edited five books. A member of the National Academy of Medicine of the National Academies, I am also an elected fellow of the American Association for the Advancement of Science, the American Statistical Association, the American Psychological Association, the New York Academy of Medicine, the Gerontological Society of America, the Academy of Behavioral Medicine Research, and other academic societies. I have devoted my career to the rigorous pursuit of knowledge through science. It is an honor to represent the Committee on Reproducibility and Replicability in Science and to discuss the content of its report and my perspectives on these topics with the U.S. House Committee on Science.

2. **Science as a shared communal process for objectively determining the truth of propositions about the world.**

Science is a method by which society tries to discover and share knowledge about the state of the world. It is fundamentally a communal process in which communicating the research process and findings, helping others to understand the knowledge obtained, and subjecting conclusions and the bases for them to public questioning and scrutiny are all essential components. What makes science special both in its claims to have access to objective knowledge about the world as well as in its communal process involves the methods by which scientific knowledge is generated. In particular, “in science, three things matter: the data, the methods used to collect the data (which give them their probative value), and the logic connecting the data and methods to conclusions.” These are the substrates of science.

Because of the critical role of methods in this process, it is an essential tenet of science that the methods used to collect or produce data and to analyze them be as thoroughly and transparently described as possible so that others may understand what was done and thereby judge the probative value of the data. Thus, transparency is critical to one of the three fundamental elements of science as I have described. As the Committee states in its report (p. 32), “When research is communicated with clear, specific, and complete accounting of the materials and methods used, the results found, and the uncertainty associated with the results, other scientists can know how to interpret the results. The communal enterprise of science allows scientists to build on others’ work, develop the necessary skills to conduct high quality studies, and check results and confirm, dispute, or refine them.” In short, observability of

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1. [https://www.pnas.org/content/115/11/2563](https://www.pnas.org/content/115/11/2563)
methods and observability of data, which might both be considered under the rubric of “transparency”, support the objectivity and communal validation process of science.

That is, as scientists or individuals consuming and judging the validity, value, and utility of science, we need to know more than one’s answer, we need to know how one got that answer. The phrase so many of us heard from our middle school math teachers “show your work” is an apt description. Only by seeing the process of the work done to produce an answer in science can we judge that answer. This observability requires transparency. This observability and transparency in turn makes reproducibility possible.

Reproducibility is a word that is used in multiple different ways in the scientific and general communities. Most recently, as I will state in Section 4, the term reproducibility was defined in the Reproducibility and Replicability in Science report as follows (p. 46) “reproducibility is obtaining consistent results using the same input data, computational steps, methods, and code, and conditions of analysis. This definition is synonymous with ‘computational reproducibility’.” Notably, reproducibility is neither a necessary nor sufficient condition for a particular scientific project to be judged as valid for supporting any conclusions drawn from it. It is a valuable aspect of science, but only one aspect of science that is valuable, and it is not clear that reproducibility should merit a privileged position as the sole arbiter of whether a particular study or data set should be admitted into a discussion of evidence.

It is worth noting that the Committee on Reproducibility and Replicability in Science did not consider the EPA proposed rule in its tasking and, since the proposed rule was released during Committee deliberations, the Committee’s report was not publicly available while EPA’s proposed rule was underdevelopment.

The proposed EPA rule does not necessarily state that reproducibility per se or even that transparency will be the sole arbiter of the admission of evidence into the policy making process, but it might be construed as implying this. Part of the challenge with the proposed rule is the substantial number of terms including reproducibility, transparency, independent validation, and others which are not all explicitly defined. This leads to ambiguity in how the rule may be interpreted and utilized. Rulemaking is arguably not served by ambiguity nor is science itself. Though some ambiguity is inherent in all language, we should strive to be precise in terms. Therefore, if some variant of the proposed EPA rule were to go forward, the public interest would likely be served by defining all terms as precisely as possible, by including factors other than reproducibility (at least as the Committee’s report has defined it) as key factors in determining how to evaluate evidence, as well as potentially making other modifications.

From my perspective, it is important to consider what the ultimate goals of science and policy making are in considering what those other modifications might be. The ultimate goal of science is to uncover and communicate truths about the state of the world. The ultimate goal of policy making is to serve the interests of the public. Science is a valuable input to policy making decisions but can never be fully dispositive of policy-making decisions which also must take into account moral, social, economic, political, and other factors. But the evaluation of the science per se should be based only on the science and not on these other factors.
Science can inform us about the plausible truth of propositions. These propositions can relate to things such as how much of a substance is in the environment, whether the amount of a substance in the environment has increased or decreased, what may have caused exposure to various substances, what the effects of exposure to various substances at various times in various doses are in humans, etc. Reproducibility is of interest because it potentially helps us to evaluate the extent to which a study supports the truth of some proposition and, in the long run, buttresses the entire enterprise of science and thereby ensures that we are better able to pursue truth through science. As the Committee report states (p. 33): “Science is engaged in a continuous process of refinement to uncover ever closer approximations to the truth.” In the report, Conclusion 2-1 states (p.33):

“CONCLUSION 2-1: The scientific enterprise depends on the ability of the scientific community to scrutinize scientific claims and to gain confidence over time in results and inferences that have stood up to repeated testing. Reporting of uncertainties in scientific results is a central tenet of the scientific process. It is incumbent on scientists to convey the appropriate degree of uncertainty in reporting their claims.”

The degree of certainty about the truth of any proposition in science comes from many sources including but not limited to reproducibility. The overall rigor of the science such as the quality of the measurement instruments used, the extent to which the findings have been replicated (as opposed to simply reproduced), the degree of transparency and reporting of the science, the extent to which it has been thoroughly peer reviewed, the extent to which results fit with a larger body of data available to the scientific community, are all factors that can come into play in judging the extent to which we have a scientific basis for believing that any particular proposition is true. Collectively, all of these things might be called “rigor.” My colleagues and I on the Committee wrote (p.52):

“Rigor is defined as ‘the strict application of the scientific method to ensure robust and unbiased experimental design’ (National Institutes of Health, 2018e). Rigor does not guarantee that a study will be replicated, but conducting a study with rigor—with a well-thought-out plan and strict adherence to methodological best practices—makes it more likely. One of the assumptions of the scientific process is that rigorously conducted studies ‘and accurate reporting of the results will enable the soundest decisions’ and that a series of rigorous studies aimed at the same research question ‘will offer successively ever-better approximations to the truth’ (Wood et al., 2019, p. 311).”

From my personal perspective, it may not be apt for a governmental rule to define the admissibility of evidence into a discussion on consideration of a policy that can and should be informed by science solely on the basis of reproducibility. I have stated that one reason for this

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is that reproducibility is neither a necessary nor a sufficient condition for a scientific study or data set to be valid or useful. This is so for many reasons.

First, a study can be reproducible and transparent and yet completely invalid. If a second analyst repeats the entire process of the first analyst applied to the same data, including the first analyst’s mistakes or to a data set that is fundamentally flawed and inappropriate, an answer may be reproduced, the process may be transparent, and yet the answer may be worthless and invalid.

Additionally, a scientific project may not be reproducible because the available information is insufficient to allow someone to reproduce it. The original raw data may not be available or for many reasons may not be able to be made public. The original investigators may not have sufficiently documented their steps to allow a full evaluation of exactly what was done permitting an exact reproduction. These are certainly limitations and should be noted. And yet, limitations are not necessarily the same as invalidating factors that should exclude information from further inquiry. A general tenet of scientific evaluation is that one should consider all of the available evidence. One may weigh the individual elements of evidence differentially, but it is uncommon to exclude particular evidence from consideration because it contains some limitations. Virtually all empirical evidence is imperfect and has some limitations. It is vital that in the scientific process those limitations are noted and some of those limitations may preclude firm conclusion-making. Yet the evidence should still be weighed and considered.

In considering the rationale for this approach, the fundamental distinction between the idea of conclusion-making and decision-making is called for. Scientific conclusion-making may depend on certain key types of data. Scientific conclusion-making may depend upon scientific evidence which supports a sufficient degree of certainty that rules out alternative explanations that would compete with a proposition being accepted as true to some reasonable degree of certainty. For example, in biomedical research, and many other domains, scientists will often not be prepared to state unequivocally that it has been demonstrated by scientific methods that ‘x causes y’ unless there has been a randomized controlled experiment in which experimental units (e.g., people in medical trial) have been randomly assigned to different levels of x (e.g., to take a drug vs. a placebo or to eat diet A vs. diet B). Yet, in medicine, nutrition, public health, and other applied domains we are often called upon to make recommendations to individual patients, citizens, or society at large and often must do so in the absence of data that would be sufficient to allow us to draw a firm scientific conclusion that x causes y. We may have to make our recommendation simply by saying that it seems likely that x causes y even though it has not been demonstrated that x causes y. When we make a recommendation that somebody should act as though x causes y even though we have not demonstrated scientifically that x causes y, we are involved in decision-making not conclusion-making. The scientific conclusion can remain unclear while we still proceed with a recommendation. In all cases that recommendation should be made with honesty, letting those to whom we communicate it know that we have not yet demonstrated that x causes y only that it seems a reasonable and plausible proposition given the available information.

This distinction was put eloquently by Sir Austin Bradford Hill in 1965 who considered issues such as whether smoking caused lung cancer. He recognized that there were not randomized
controlled trials demonstrating unequivocally that smoking causes lung cancer but that the evidence for an association between smoking and lung cancer was extremely strong and, combined with much other information in the scientific domain, has led virtually all scientists to accept the proposition that smoking causes lung cancer as true beyond any reasonable doubt.³

In discussing the thought process involved in this, Sir Austin Bradford Hill stated “in passing from association to causation I believe in ‘real life’, we shall have to consider what flows from that decision. On scientific grounds, we should do no such thing. The evidence is there to be judged on its merits and the judgment (in that sense) should be utterly independent of what hangs upon it – or who hangs because of it.”⁴

Similarly, in a recent New York Times’ article considering the controversy around the health effects of red meat,⁵ I was quoted as describing the distinction between evidence for conclusion-making versus evidence for decision-making, stating “The standards of evidence for the former are scientific matters and should not depend on extra scientific considerations. The standards of evidence for the latter are matters of personal judgment or in some cases legislation. People should be aware of the uncertainty and make their decisions based on that awareness.”

This recognition of the difference between decision-making for applied purposes, the fundamental aspect of policy making, and conclusion-making for scientific purposes underlies the very credible approaches taken by multiple other government organizations with respect to their consideration of evidence around key questions. For example, in their discussion of what constitutes adequate evidence for making their decisions about such things as drug approvals, the U.S. Food and Drug Administration has stated (p. 5):⁶

“The need for independent substantiation has often been referred to as the need for replication of the finding. Replication may not be the best term, however, as it may imply that precise repetition of the same experiment in other patients by other investigators is the only means to substantiate a conclusion. Precise replication of a trial is only one of a number of possible means of obtaining independent substantiation of a clinical finding and, at times, can be less than optimal as it could leave the conclusions vulnerable to any systematic biases inherent to the particular study design. Results that are obtained from studies that are of different design and independent in execution, perhaps evaluating different populations, endpoints, or dosage forms, may provide support for a conclusion of effectiveness that is as convincing as, or more convincing than, a repetition of the same study.”

. . . (p.17) “However, situations often arise in which studies that evaluate the efficacy of a drug product lack the full documentation described above (for example, full patient records may not be available) or in which the study was conducted with less monitoring than is ordinarily seen in commercially

³ https://www.americanscientist.org/article/reasonable-versus-unreasonable-doubt
⁴ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1898525/
⁶ https://www.fda.gov/media/71655/download
sponsored trials. Such situations are more common for supplemental indications because postapproval studies are more likely to be conducted by parties other than the drug sponsor and those parties may employ less extensive monitoring and data-gathering procedures than a sponsor. Under certain circumstances, it is possible for sponsors to rely on such studies to support effectiveness claims, despite less than usual documentation or monitoring.”

Similarly, the “Reference Manual on Scientific Evidence” produced by the National Research Council of the National Academies and the Federal Judicial Center states (p.330):  

“A party that offers data to be used in statistical work, including multiple regression analysis, should be encouraged to provide the following to the other parties: (a) a hard copy of the data when available and manageable in size, along with the underlying sources; (b) computer disks or tapes on which the data are recorded; (c) complete documentation of the disks or tapes; (d) computer programs that were used to generate the data (in hard copy if necessary, but preferably on a computer disk or tape, or both); and (e) documentation of such computer programs. The documentation should be sufficiently complete and clear so that the opposing expert can reproduce all of the statistical work.”

Yet, also states (Preface, p. xiv):

“In the final analysis, a judge does not have the option of suspending judgment until more information is available, but must decide after considering the best available science.”

In the academic community, we have a system called GRADE.

“GRADE (Grading of Recommendations, Assessment, Development and Evaluations) is a transparent framework for developing and presenting summaries of evidence and provides a systematic approach for making clinical practice recommendations.[1-3] It is the most widely adopted tool for grading the quality of evidence and for making recommendations with over 100 organisations worldwide officially endorsing GRADE.”

In using systems like GRADE, while limitations of individual studies are noted, “...the credibility and trustworthiness of the totality of evidence [emphasis added] across studies in relation to a specific research question” is key. This reliance on the totality of evidence via GRADE is also a hallmark of the process for generating dietary recommendations used by Federal Agencies.  

Thus, GRADE is used to help evaluate evidence that can potentially support decisions about public health recommendations. Importantly, GRADE defines principles for standards of evidence and helps evaluate individual pieces of evidence so that they may be properly weighed in an analysis. In contrast, GRADE does not specifically state that certain types of evidence will

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8 https://bestpractice.bmj.com/info/toolkit/learn-ebm/what-is-grade/
9 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6001464/
10 https://www.ncbi.nlm.nih.gov/books/NBK465019/
simply be excluded from discussion, but rather outlines which types of evidence should be given greater value and lead to more confident conclusions versus less confident conclusions.

All of this leads one to ask whether the public interest would be well-served by modifying the current proposed EPA rule to increase clarity around definitions and procedures for its implementation. Or would the public interest be better-served by a more thorough and expansive statement of principles as to what constitutes good scientific evidence, about ideals of scientific evidence which include, but are not limited to, reproducibility and transparency, and suggestions for how to weigh and evaluate evidence both for drawing scientific conclusions and for making prudent decisions. A statement of such broad principles may serve the interests of the public and of science by promoting openness in science, good quality science, rational policy making, and transparency in both science and government, more so than does a rule which serves to exclude certain information from consideration.

3. **Executive Summary of the "Reproducibility and Replicability in Science" of the National Academies.**

The executive summary of the "Reproducibility and Replicability in Science" report of the National Academies appears as Appendix A to this document.

4. **Responses to Specific Questions.**

   a) **The definition of reproducibility, as determined by the Committee on Reproducibility and Replicability in Science of the National Academies.**

   The term reproducibility is defined in Conclusion 3-1 in the Committee’s report, "Reproducibility and Replicability in Science" (p. 46):

   *Reproducibility* is obtaining consistent results using the same input data, computational steps, methods, and code, and conditions of analysis. This definition is synonymous with “computational reproducibility” . . .

   The Committee’s definition of replicability is also important. The same section of the report defines:

   “*Replicability* to mean obtaining consistent results across studies aimed at answering the same scientific question, each of which has obtained its own data.”

   b) **The potential consequences of EPA's goal to establish a reproducibility standard within its regulatory process by requiring that the underlying data of scientific studies be made available.**

   In my opinion, the answer to this depends upon exactly how the rule is implemented and modified. If reproducibility were to become the sole arbiter of whether information, a study, or a data set were included in policy making considerations, I believe the effects would be deleterious for the reasons I have stated above. Some high-quality information that, for any number of reasons, cannot be made fully reproducible and transparent would be excluded. Moreover, the rule might lead to the mistaken conclusion that information that was judged to
be admissible because it met a transparency or reproducibility standard was valid information, and as I have indicated above there can be much that is reproducible and transparent but is nonetheless invalid or otherwise flawed.

The likely quality of the outcomes as a result of the proposed rule would also depend upon the extent to which the request that underlying data be transparent and the studies be reproducible be implemented flexibly and in an unbiased manner or inflexibly or in a biased manner. Were a rule to be implemented that provided strong encouragement and incentives for making science reproducible and transparent, that would be good. In contrast, if such a rule became *dicto simpliciter* and a sole arbiter of whether information could be included, that would be bad. Certainly, the current EPA rule contains many situations in which exceptions can be made. That is wise. Yet what is unclear to me is whether the rule is necessary at all and, if it is valuable, how these exceptions will be adjudicated and whether the process of making them will lead to excessive use of time, excessive exclusion of studies, and potential bias in terms of which studies and datasets ultimately are allowed to be included.

c) Whether it is appropriate to determine the rigor or regulatory applicability of a study based solely on its reproducibility.

No, from my perspective, it would not be appropriate to determine the rigor or the regulatory applicability of a study based solely on its reproducibility as reproducibility is defined in the National Academies’ report for the reasons I have stated above. In short, reproducibility is neither a necessary nor a sufficient condition to determine the validity of a study for in turn determining the truth of a proposition.

d) Whether a reproducibility requirement could increase the risk that sound science could be excluded from EPA environmental and public health regulations.

It is not clear to me that the currently proposed rule definitively proposes a reproducibility requirement as the sole arbiter or a *sine qua non* for which studies and datasets can enter into policy making because the proposed rule only addresses certain aspects of policy making and it allows for exceptions. Yet, for the reasons I have described above, I do think there is some danger that if reproducibility is poorly defined and more importantly if it becomes the sole and essential criterion for inclusions of data, then yes, such a requirement could risk that sound science would be excluded from EPA environmental and public health regulations.

5. Summation.

In summation, the National Academies Committee and I as both a member and an individual scientist are a strong proponents of reproducibility and replicability, of transparency in science, and more importantly and more broadly of the utmost rigor in the execution of science and in the unvarnished truthful communication of scientific information among scientists and to society at large. I personally believe that any effort that serves to promote the goals of reproducibility, transparency, scientific rigor, and truthful communication in and about science should be supported. To the extent that EPA can enact guidance, statements, policies, and procedures that promote these practices, that is all to the good. Yet there must be flexibility
such that we may consider and speak openly about data even when those data have limitations including, but not limited to, incomplete transparency or reproducibility of some datasets and studies. Just as other scientific communities and other government regulatory bodies relying on scientific information must do, in this realm, I advocate that we consider all the information, while providing the most weight to the best information.
Appendix A

The Executive Summary from “Reproducibility and Replicability in Science” is copied below. The full report may be downloaded without charge at: https://www.nap.edu/catalog/25303/reproducibility-and-replicability-in-science

EXECUTIVE SUMMARY

When scientists cannot confirm the results from a published study, to some it is an indication of a problem, and to others, it is a natural part of the scientific process that can lead to new discoveries. As directed by Congress, the National Science Foundation (NSF) tasked this committee to define what it means to reproduce or replicate a study, to explore issues related to reproducibility and replicability across science and engineering, and to assess any impact of these issues on the public’s trust in science.

Various scientific disciplines define and use the terms “reproducibility” and “replicability” in different and sometimes contradictory ways. After considering the state of current usage, the committee adopted definitions that are intended to apply across all fields of science and help untangle the complex issues associated with reproducibility and replicability. Thinking about these topics across fields of science is uneven and evolving rapidly, and the report’s proposed steps for improvement are intended to serve as a roadmap for the continuing journey toward scientific progress.

We define reproducibility to mean computational reproducibility—obtaining consistent computational results using the same input data, computational steps, methods, and code, and conditions of analysis; and replicability to mean obtaining consistent results across studies aimed at answering the same scientific question, each of which has obtained its own data. In short, reproducibility involves the original data and code; replicability involves new data collection and similar methods used by previous studies. A third concept, generalizability, refers to the extent that results of a study apply in other contexts or populations that differ from the original one. A single scientific study may entail one or more of these concepts.

Our definition of reproducibility focuses on computation because of its large and increasing role in scientific research. Science is now conducted using computers and shared databases in ways that were unthinkable even at the turn of the 21st century. Fields of science focused solely on computation have emerged or expanded. However, the training of scientists in best computational research practices has not kept pace, which likely contributes to a surprisingly low rate of computational reproducibility across studies. Reproducibility is strongly associated with transparency; a study’s data and code have to be available in order for others to reproduce and confirm results. Proprietary and non-public data and code add challenges to meeting transparency goals. In addition, many decisions related to data selection or parameter setting for code are made throughout a study and can affect the results. Although newly developed tools can be used to capture these decisions and include them as part of the digital record, these tools are not used by the majority of scientists. Archives to store digital artifacts linked to published results are inconsistently maintained across journals, academic and federal institutions, and

11 The definition of generalizability used by the NSF (Bollen, et al., 2015).
disciplines, making it difficult for scientists to identify archives that can curate, store, and make available their digital artifacts for other researchers.

To help remedy these problems, the NSF should, in harmony with other funders, endorse or create code and data repositories for long-term preservation of digital artifacts. In line with its expressed goal of “harnessing the data revolution,” NSF should consider funding tools, training, and activities to promote computational reproducibility. Journal editors should consider ways to ensure reproducibility for publications that make claims based on computations, to the extent ethically and legally possible.

While one expects in many cases near bitwise agreement in reproducibility, the replicability of study results is more nuanced. Non-replicability occurs for a number of reasons that do not necessarily reflect that something is wrong. Some occurrences of non-replicability may be helpful to science—discovering previously unknown effects or sources of variability—while others, ranging from simple mistakes to methodological errors to bias and fraud, are not helpful. It is easy to say that potentially helpful sources should be capitalized on, while unhelpful sources must be minimized. But when a result is not replicated, further investigation is required to determine whether the sources of that non-replicability are of the helpful or unhelpful variety or some of both. This requires time and resources and is often not a trivial undertaking.

A variety of standards are used in assessing replicability, and the choice of standards can affect the assessment outcome. We identified a set of assessment criteria that apply across sciences highlighting the need to adequately report uncertainties in results. Importantly, the assessment of replicability may not result in a binary pass/fail answer; rather, the answer may best be expressed as the degree to which one result replicates another.

One type of scientific research tool, statistical inference, has had an outsized role in replicability discussions due to the frequent misuse of statistics such as the $p$-value and threshold for determining “statistical significance.” Inappropriate reliance on statistical significance can lead to biases in research reporting and publication; although publication and research bias are not restricted to studies involving statistical inference. A variety of ongoing efforts is aimed at minimizing these biases and other unhelpful sources of non-replicability.

Researchers should take care to estimate and explain the uncertainty inherent in their results, to make proper use of statistical methods, and to describe their methods and data in a clear, accurate, and complete way. Academic institutions, journals, scientific and professional associations, conference organizers and funders can take a range of steps to improve replicability of research. We propose a set of criteria to help determine when testing replicability may be warranted. It is important for everyone involved in science to endeavor to maintain public trust in science based on a proper understanding of the contributions and limitations of scientific results.

A predominant focus on the replicability of individual studies is an inefficient way to assure the reliability of scientific knowledge. Rather, reviews of cumulative evidence on a subject, to assess both the overall effect size and generalizability, is often a more useful way to gain confidence in the state of scientific knowledge.

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EDUCATION

Columbia University College of Physicians and Surgeons & Saint Luke’s/Roosevelt Hospital
NIH Post-Doctoral Research Fellowship in the Department of Medicine & Obesity Research Center, 1991-94

Johns Hopkins University School of Medicine & The Kennedy Institute
Post-Doctoral Fellow in Departments of Pediatrics and Behavioral Psychology, 1990-91

Hofstra University, Hempstead, New York
Ph.D. in Clinical and School Psychology from an APA approved program, July 1990.

Hofstra University, Hempstead, New York

Vassar College, Poughkeepsie, New York
Bachelor of Arts in Psychology, May 1985.

CURRENT EMPLOYMENT

Indiana University Bloomington: August 2017 - Present

Dean, School of Public Health.

Provost Professor (tenured). Provost professors “have achieved local, national, and international acclaim both for their research/creative activity and for their teaching”¹ and Indiana University.

Primary Departmental Affiliation: Department of Epidemiology & Biostatistics.

♦ Distinguished Professor (2018 to current). “Distinguished Professor is a University-wide appointment, recognizes international accomplishments, is to be limited in number, and is to be recommended to the Board by the Office of the President in order to confer richly deserved prestige and honor on those selected to receive this designation” (Indiana University Policy).

¹
The University of Alabama at Birmingham – Primary Roles

Distinguished Professor (2011 to 2017). “Distinguished Professor is a campus-wide appointment, recognizes international accomplishments, is to be limited in number, and is to be recommended to the Board by the appropriate President and the Chancellor in order to confer richly deserved prestige and honor on those selected to receive this designation” (UAB Faculty Handbook). Dr. Allison was the 21st person to receive this distinction in the history of UAB.

October 2016 to August 2017, my two primary roles within UAB (in addition to being a faculty member) were as follows.

Associate Dean for Research & Science of the School of Health Professions

As Associate Dean for Research & Science, I serve as part of the School’s leadership team. I advise the dean and contribute the School’s development (philanthropic fund-raising campaign). My mission is to promote the highest levels of scientific achievement in terms of rigor, quality, impact, funding, and productivity. I am charged with developing a research promotion program involving seminars and services to facilitate, encourage, and support the School’s scientific enterprise. I have responsibility for assessing the School’s scientific productivity and needs and constructing a plan to meet those needs. That work is underway.

Director, Nutrition Obesity Research Center and Director, Office of Energetics

Position entails: (a) Growing and leading Center of over 130 members; (b) Obtaining competitive renewals of NIH Center Grant; (c) Developing, obtaining funding for, and leading extramurally funded training programs in obesity; (c) arranging and overseeing educational enrichment program of seminars, courses, workshops, and national conferences; (d) conducting original research on the causes, consequences, and treatment and prevention of obesity; (e) Facilitating the nutrition and obesity research of other investigators by funding core laboratories and pilot grants; (f) mentoring students, fellows, and young faculty; (g) supervising administrative staff; (h) Promoting new cross-campus collaborations; and (i) publicity and fund-raising.

As Director of the Office of Energetics (with energetics being the study of the causes, mechanisms, and consequences of the acquisition, storage, and utilization of metabolizable energy by biological organisms), I am responsible for developing unique programs and initiatives for this highly collaborative Office. These programs and initiatives address obesity and related factors from multiple perspectives to provide new insights.
July 2011 through September 2016, my two primary roles within the University were as follows.

**Associate Dean for Science of the School of Public Health**

As Associate Dean for Science, I play a major role the School's development (philanthropic fund-raising campaign), have responsibility for promoting higher levels of scientific investigation and developing a comprehensive Research Support Program that offers programs, seminars, and services to facilitate, encourage, and support the School's scientific enterprise. I also established programs for the publicity for our research activities and restructuring of the School's IT Department.

In this role I have led and/or participated in activities including:
- School Reaccreditation (CEPH)
- School-Level Strategic Planning
- Fund-raising
- Faculty Recruitment
- Development of graduate student and post-doctoral training programs
- Grant promotions
- Managing challenging ethical/personnel issues
- Representing the School on University committees and projects related to research
- Budgeting and fiscal management

**Director, Nutrition Obesity Research Center and Director, Office of Energetics**

Position entails: (a) Growing and leading Center of over 130 members; (b) Obtaining competitive renewals of NIH Center Grant; (c) Developing, obtaining funding for, and leading extramurally funded training programs in obesity; (c) arranging and overseeing educational enrichment program of seminars, courses, workshops, and national conferences; (d) conducting original research on the causes, consequences, and treatment and prevention of obesity; (e) Facilitating the nutrition and obesity research of other investigators by funding core laboratories and pilot grants; (f) mentoring students, fellows, and young faculty; (g) supervising administrative staff; (h) Promoting new cross-campus collaborations; and (i) publicity and fund-raising.

As Director of the Office of Energetics (with energetics being the study of the causes, mechanisms, and consequences of the acquisition, storage, and utilization of metabolizable energy by biological organisms), I am responsible for developing unique programs and initiatives for this highly collaborative Office. These programs and initiatives address obesity and related factors from multiple perspectives in ways that provide new insights into this epidemic that ravages huge segments of the population.

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**The University of Alabama at Birmingham – Past Primary Roles (2001 to 2011)**

Primary Appointment: **Professor of Biostatistics**. My primary roles within the University were.

**Head, Section on Statistical Genetics**

Position entails: (a) Building and leading Section on Statistical Genetics; (b) conducting original research in design and statistical analysis methods with particular emphasis on statistical genetics; (c) conducting original research on the causes, consequences, and treatment and prevention of diseases areas; (d) collaborating with other investigators on their projects, particularly with respect to data analysis, and training students, interns and post-doctoral fellows; (e) developing curricula and participating in graduate level education; (f) supervising

**Director, Nutrition Obesity Research Center**

Position (appointed 2003) entails: (a) Growing and leading Center; (b) Obtaining competitive renewals of NIH Core Grant; (c) Developing, obtaining funding for, and leading extramurally funded training programs in obesity research; (c) arranging and overseeing educational enrichment program of seminars, workshops, and national conferences; (d) conducting original research on the causes, consequences, and treatment and prevention of obesity; (d) Facilitating the nutrition and obesity research of other investigators by funding core laboratories and pilot grants; (f) mentoring students,
Other Notable Roles within UAB

- Head, Section of Statistical Genetics (SSG), Dept of Biostatistics, 2001 - 2011. Founded SSG in 2001. At peak, SSG included 13 full time faculty, and roughly 40 total personnel, with a total annual budget of ~ 3 to 4 $million.
- Associate Director of Clinical Nutrition Research Center, 2001 – 2003
- Acting Director of Clinical Nutrition Research Center, Jan – May 2003
- Director of Nutrition Obesity Research Center (NORC; formerly called Clinical Nutrition Research Center), 2003 – 2017
- Senior Scientist, UAB Arthritis and Musculoskeletal Center, 2002 - 2017
- Senior Scientist UAB’s Center for Outcomes and Effectiveness Research and Education (COERE), 2002 – 2017.
- Senior Scientist, UAB Minority Health and Research Center, 2003 – 2017
- Senior Scientist, UAB Center for Aging Research, 2005 – 2017
- Senior Scientist, UAB Comprehensive Diabetes Center, 2008 – 2017
- Senior Scientist, UAB Center for AIDS Research, 2008 – 2017
- Senior Scientist, UAB Center for Cardiovascular Biology, 2010 – 2017
- See ‘INTRAMURAL COMMITTEE & SERVICE WORK’ section for additional UAB appointments.

Prior to UAB

June 1994 to March, 2001

The New York Obesity Research Center, Saint Luke's/Roosevelt Hospital Center. Position: Associate Research Scientist. Position entails designing and conducting original research in the causes, consequences, and treatment and prevention of obesity and related areas, collaborating with other investigators on their projects, particularly with respect to data analysis, and training students, interns and post-doctoral fellows.

- Member of Executive Committee.
- Associate Director of Biostatistics & Computing Sub-Core.
- Associate Director of Post-Doctoral Fellow Training Program.

PAST ACADEMIC APPOINTMENTS

October, 2016 to 2017.

Primary Appointment

Distinguished Professor, Department of Nutrition Sciences, Associate Dean for Research & Science, (with tenure) – University of Alabama at Birmingham, School of Health Professions.

Secondary Appointments
Professor, Department of Biology, College of Arts & Sciences, UAB.
Professor, Department of Biostatistics, School of Public Health, UAB.
Professor, Department of Genetics, School of Medicine, UAB.
Professor, Department of Medicine, School of Medicine, UAB.


Primary Appointment

Distinguished Professor, Quetelet Endowed Professor of Public Health, Associate Dean for Science, (with tenure) – University of Alabama at Birmingham, School of Public Health.

Secondary Appointments

Professor, Department of Biology, College of Arts & Sciences, UAB (as of Sept 1, 2016).
Professor, Department of Biostatistics, School of Public Health, UAB.
Professor, Department of Nutrition Sciences, School of Health Professions, UAB.
Professor, Department of Genetics, School of Medicine, UAB.
Professor, Department of Medicine, School of Medicine, UAB.

March, 2001 to June 2011.

Primary Appointment

Professor of Biostatistics (with tenure) – University of Alabama at Birmingham, School of Public Health, Department of Biostatistics.

Secondary Appointments

Professor, Department of Nutrition Sciences, University of Alabama at Birmingham.
Professor, Department of Genetics, University of Alabama at Birmingham.
Professor, Department of Medicine, Division of Rheumatology, University of Alabama at Birmingham.


July 1997 to 2000. Assistant Professor (adjunct) of Psychology (in Psychiatry) in the Associated Faculty of the School of Medicine – University of Pennsylvania.

**HONORS & AWARDS**

- Selected to receive The *Harry V. Roberts Statistical Advocate of the Year Award* from the American Statistical Association, 2018.
- Elected to *European Academy of Sciences and Arts*, 2018.
- Elected to the *Academia Europaea*, 2017. *Academia Europaea* is the only Europe-wide Academy with individual membership from Council of Europe states and other nations across the world and is an organisation of eminent, individual scientists and scholars, covering the full range of academic disciplines.
- Selected to receive the *Thomas A. Wadden Award for Distinguished Mentorship* from the Obesity Society, 2017.
- Elected a fellow to the Academy of Behavioral Medicine Research, 2017.
- Received Texas A&M Department of Health & Kinesiology Scholar Award, the department’s highest honor bestowed to colleagues in the field and delivered Distinguished Lecture, April, 2017.
- Received the American College of Nutrition’s Mark Bieber Professional Award, 2016.
- Selected to deliver the 2016 Indiana University School of Medicine Corcoran Lecture, and distinguished endowed lectureship. Lecture delivered October, 2016.
- Invited to and attended *The White House by the Office of Science and Technology Policy* to participate in a symposium on *STEM mentoring and volunteering*, August, 2016.
- Elected a Fellow of the American Heart Association (FAHA) conferred by the Council on Lifestyle and Cardiometabolic Health, 2015.
- Selected as annual ‘Blackburn Lecturer”, 2015. Each year, the Blackburn Lectureship honors the seminal accomplishments of a leader in Obesity Medicine, who gives a state-of-the-art lecture at Harvard’s *Blackburn Course in Obesity Medicine*.
- Awarded the ‘F1000 Faculty Member of the Year Award 2014’ for the Diabetes & Endocrinology Faculty.
- Elected as a Fellow of the New York Academy of Medicine, 2014.
- Selected for the 2014 Carl J. Martinson, MD, Lectureship in Preventive Medicine by the University of Minnesota.
- Selected as the 2014 Atwater Lecturer by the USDA and the American Society for Nutrition. The W.O. Atwater Lectureship was established in 1968 to honor the memory of Wilbur Olin Atwater (1844-1907) and to recognize scientists who have made unique contributions toward improving the diet and nutrition of people around the world.
• Selected as the 2013 Joy Goodwin Distinguished Lecturer by Auburn University. http://www.vetmed.auburn.edu/joy-goodwin-lecture-series#.Uxsp6U2YY3E.

• Selected for membership in the national public health honor society, Delta Omega, 2013.

• Recipient of 2013 The Wright Gardner Award from the Alabama Academy of Science. This award was established by the Alabama Academy of Science to honor individuals whose research work during residence in Alabama has been outstanding.

• Elected to membership in the Johns Hopkins Society of Scholars in 2013. The Society was established in 1967 by the trustees of the University to honor distinguished former Johns Hopkins postdoctoral fellows and junior or visiting faculty who have served at least a year at Johns Hopkins and thereafter gained marked distinction elsewhere in their fields.

• Recipient of American Society of Nutrition’s 2013 Dannon Institute Mentorship Award.

• Recipient of UAB Graduate Dean’s Excellence in Mentorship Award for 2013.

• Appointed the first Quetelet Endowed Professor of Public Health by the University of Alabama at Birmingham, 2012.

• Elected to Fellowship in the Institute of Mathematical Statistics, 2012.

• Selected as the 2011 UAB Distinguished Faculty Lecturer Award. The Distinguished Faculty Lecturer Award honors individuals in the Academic Health Center of the University of Alabama at Birmingham who have made major contributions in education, research, or service. It is the highest award UAB gives on the Health Sciences campus. See: http://www.soph.uab.edu/event/distinguishedfaculty2011.

• Selected as 2011 Annual Delta Omega Honorary Society Lecturer by the University of South Carolina. Presented talk entitled: “Obesity: A Look Through the Kaleidoscope”.

• Member of National Institutes of Health College of CSR Reviewers, appointed 2010.

• Recipient of the 2009 TOPS Research Achievement Award from the Obesity Society (formerly NAASO). This award recognizes an individual for singular achievement or contribution to research in the field of obesity. Recipients receive a $5,000 cash prize plus a travel grant to the Annual Scientific Meeting. The award was presented during a plenary session at the annual meeting at which the recipient delivers the TOPS Award Lecture.

• Recipient of the American Society of Nutrition’s Centrum Center for Nutrition Science Award. Given in recognition of recent investigative contributions of significance to the basic understanding of human nutrition. Conferred at ceremony at the Experimental Biology meeting in 2009.

• Elected Fellow of the American Association for the Advancement of Science (AAAS), 2009.

• Elected as a Fellow of the Society of Behavioral Medicine, 2009.

Elected to National Academy of Medicine (formerly the Institute of Medicine) of the United States National Academies, 2012.
• Faculty mentor of the year nominee at the Compact for Faculty Diversity Institute on Teaching and Mentoring, 2009.

• Elected as a Fellow of the American Psychological Association, 2008.

• Recipient of a 2008 Minority Health Research Center (MHRC) Charles Barkley Excellence in Mentoring Award. Award conferred by Charles Barkley at MHRC Gala.

Recipient of a 2006 Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM). The White House established the Presidential Awards for Excellence in Science, Mathematics and Engineering Mentoring (PAESMEM) to identify outstanding mentoring efforts to enhance the participation of groups underrepresented in science, mathematics and engineering. The awards are given competitively as part of a national peer-review process. This is the nation’s highest award for mentoring given to no more than 10 individuals nationally each year. It was accompanied by a $10,000 prize, a Presidential certificate awarded at the White House on November 16th, 2007, and a personal visit with President Bush in the Oval Office.

• Elected as a Fellow of the American Statistical Association, 2007, a distinction given to no more than 1/3rd of 1% of the membership annually.

• Elected Fellow of the American Psychological Society.

• Selected as a 2007 John H. Blaffer Lecturer by the MD Anderson Cancer Center.

• Selected as the Spring 2006 York Distinguished Lecturer by the University of Florida. See: http://yorklecture.ifas.ufl.edu/Allison.htm

• Selected as 2006 Residents’ Invitational Grand Rounds Lecturer for the Department of Psychiatry at Washington University of St. Louis.

• Recipient of the 2005 UAB School of Public Health Distinguished Faculty Investigator Award.


• Recipient of the 2002 Andre Mayer Award from the International Association for the Study of Obesity (IASO). This international award is given once every four years to signify outstanding achievement by an investigator who is less than 40 years old. Award conferred August 2002 and accompanied by a $1,000 prize.

• Recipient of the 2002 Lilly Scientific Achievement Award from the North American Association for the Study of Obesity (NAASO). This annual award is intended to signify outstanding achievement by an investigator who is within 15 years of having received their doctoral degree. Accompanied by a $5,000 prize.
- Recipient of the 2000 Wodecroft Investigator Award from the National Alliance for Research on Schizophrenia and Affective Disorders.

- Recipient of the 1999 Award for Outstanding Achievement in Health Psychology from the Health Psychology Division of the American Psychological Association.

- Visiting Professor at Guy’s & St. Thomas’ Trust Hospital’s Twin Research & Genetic Epidemiology Unit, London England, 1999-2000.

- Recipient of the 1996 Neal Miller Early Career Award from the Academy of Behavioral Medicine. Award accompanied by $1,500 prize.

- Received Bursary Award from the Ciba Foundation to attend Symposium on *The Origins and Consequences of Obesity* in Kingston, Jamaica, November 27-30, 1995. Award paid all expenses to conference and provided full support to visit and study in another scientist’s laboratory. I studied statistical gene mapping strategies with Nicholas Schork and Robert Elston at Case Western Reserve University from January 1996 to February 1996.

- Received 1995 Young Investigators award for travel to and attendance at FASEB Summer Conference on *Genetic Aspects of Obesity and Energy Regulation*.


- Finalist (one of three) for the Society for Clinical Trials’ Student and Post-Doctoral Fellow Scholarship Awards for: Allison, D. B., & Pi-Sunyer, F. X. Optimal Stage I Screening Criteria to Minimize Clinical Trial Recruitment Costs. Presented at the annual meeting of the Society for Clinical Trials, May, 1994.


- Received Travel Award to Young Investigators at the 1993 FASEB Summer Conference on *Genetic Aspects of Obesity and Energy Regulation* held in Copper Mountain Colorado.


- Received Merit Citation from Society for Behavioral Medicine for: Murphy, C. M., Babbitt, R. L., Allison, D. B., & Patterson, H. L. The Prevalence and Characterization of Obesity Among Children with Developmental Disabilities Compared to Nondevelopmentally Disabled Controls. Paper presented to the Society for Behavioral Medicine, 1992.


- Nominated for Robinson Award for best dissertation at Hofstra University in 1990.
KEY LEADERSHIP ACTIVITIES IN FUND-RAISING, EDUCATION, TRAINING & RESEARCH PROMOTION (selected)

- Established the “William Sealy ‘Student’ Gosset Professorship” in Biostatistics at UAB. Conceived the idea and raised the endowment funds. Approved by UAB’s Board of Trustees in 2008. This is the first endowed professorship in UAB’s School of Public Health. Website at http://www.soph.uab.edu/ssi/Professorship.

- Established the “Sir David Cox Professorship” in Biostatistics at UAB. Conceived the idea and raised the endowment funds. Approved by UAB’s Board of Trustees in 2010. This is the second endowed professorship in UAB’s School of Public Health. Website at http://www.soph.uab.edu/ssi/Professorship.

- Established the “Quetelet Endowed Professor of Public Health” at UAB. Conceived the idea and raised the endowment funds. Approved by UAB’s Board of Trustees in 2012. This is the third endowed professorship in UAB’s School of Public Health. Website at http://www.uab.edu/development/waystogive/endowments/professorships.

- Established the “Antoine Lavoisier Endowed Professorship of Energetics and Healthy Lifestyles” at UAB. Conceived the idea and raised the endowment funds. Approved by UAB’s Board of Trustees in 2014. This is the fourth endowed professorship in UAB’s School of Public Health.

- Founding Editor-in-Chief of Frontiers in Genetics, an open-source peer-reviewed journal, 2010 - present.

- Developed & Established Campus-Wide ‘Biguan’ Program, a coaching and ‘secluded writing’ program for helping both senior and early-career faculty and scientists produce better grant applications with greater ease and speed implemented at UAB.

- Science Unbound Foundation (SUF). Founded and serve as the President of the SUF. The SUF is an IRS-approved 501c3 not-for-profit foundation that was inaugurated on 6/17/03 and has as its mission: "Furthering scientific knowledge in the service of health, happiness, and quality of life of humankind through scientific research and education." The Foundation provides annual awards to investigators for papers published in 5 categories: (UAB) obesity or nutrition, (UAB) statistical genetics, (UAB) general statistics, (UAB Student) obesity-related research, & (New York Obesity Research Center, St. Luke’s-Roosevelt Hospital/Columbia University) obesity-related. - Website at http://www.scienceunboundfoundation.org/index.html.

- Janet L. Norwood Award for Outstanding Achievement by A Woman in The Statistical Sciences. Conceived and established the award not only to recognize Dr. Norwood’s achievements, but also to recognize the contribution of all women to the statistical sciences. Currently fund-raising for endowment. For details, see: http://www.soph.uab.edu/ssi/norwoodaward/aboutaward.

- Short Course "Statistical Genetics & Genomics". Principal Investigator & Director of National Science Foundation-funded national short course held annually. 2008 to 2010. - Website at http://www.soph.uab.edu/ssi/courses.

- Short Course "Statistical Genetics for Obesity & Nutrition Researchers". Principal Investigator & Director of NIDDK-funded national short course "Statistical Genetics for Obesity & Nutrition Researchers" (R01DK056366 & R56DK056366). Six courses held with roughly 50 students per course for the grant period from 7/1/00 - 6/30/06. - Website at http://www.soph.uab.edu/ssi/courses.

- Short Course "Frontiers in Statistical Genetics for NIAMS Researchers". Co-Director of NIAMS-funded national short course "Frontiers in Statistical Genetics for NIAMS Researchers"
Two courses held with roughly 50 students per course for the grant period 6/1/04 - 5/31/06. - Website at http://www.soph.uab.edu/ssg/courses.

- **Short Course on "Design and Analysis of Plant Microarray Experimentation".** Principal Investigator & Director of NSF-funded national short course offered as part of "Design and Analysis of Plant Microarray Experimentation" (grant # 0217651). Two courses held with roughly 50 students per course for the grant period from 10/1/02 - 9/30/06. - Website at http://www.soph.uab.edu/ssg/courses.

- **UAB Statistical Genetics Post-doctoral Training Program.** Principal Investigator & Director of NHLBI-funded T32HL072757 "UAB Statistical Genetics Post-doctoral Training Program" for postdoctoral fellows. Wrote initial grant application to obtain funding for program, responsible for recruitment of fellows, overseeing implementation of program, mentoring other mentors, and mentoring selected fellows. 6 slots per year for the grant period 4/01/09 - 3/31/13. - Website at http://www.soph.uab.edu/ssg/opportunities/postdoctoral.

- **UAB Obesity Post-Doctoral Training Program.** Principal Investigator & Director of NIDDK-funded T32DK062710 "UAB Obesity Training Program" for postdoctoral fellows. Wrote initial grant application to obtain funding for program, responsible for recruitment of fellows, overseeing implementation of program, mentoring other mentors, and mentoring selected fellows. 4 slots per year for the grant period 6/1/04 - 5/20/09. - Website at http://www.norc.uab.edu/opportunities.

- **UAB NHLBI-funded Obesity Pre-Doctoral Training Program.** Principal Investigator & Director “UAB Pre-Doctoral Training Program in Obesity Related Research.” A T32 pre-doctoral training grant from the National Heart, Lung, and Blood Institute (T32HL105349). Period: 09/22/2010 – 08/31/2015. Will have 8 slots per year once achieving steady state.

- **Kraft-UAB Obesity Pre-Doctoral Training Program.** Principal Investigator & Director of Kraft Foods-funded grant to offer pre-doctoral training fellowships to Ph.D. students studying obesity-related research at UAB. 2006 – 2013.

- **UAB Biostatistics Pre-doctoral Training Program.** Initial Principal Investigator & Director of NHLBI-funded 32HL079888 "UAB Biostatistics Pre-doctoral Training Program" predoctoral fellows. Wrote initial grant application to obtain funding for program, responsible for recruitment of fellows, overseeing implementation of program, mentoring other mentors, mentoring selected fellows, for the initial grant period. Then passed Directorship to Hemant Tiwari. Website at http://www.soph.uab.edu/ssg/opportunities/predoctoral.

- **Hughes Med-Grad (HMG) Fellowship Program** for predoctoral fellows, Principal Investigator Thomas Clemens PhD. Assisted Dr. Clemens in conceiving program and writing grant application to the Howard Hughes Medical Institute. Currently serve as a member of the HMG Development Committee, Core Leadership team, Co-Direct the Quantitative Methods course, and as a potential mentor for fellows. The program aims to create a new pathway of graduate education designed to give PhD students a more targeted exposure of human biology and disease. The interdepartmental program pairs students with mentors conducting cutting edge disease-based research and provides exposure to patient-oriented, case-based topics, clinical research design and understanding of drug discovery. 6 slots, 4/1/06 - 3/31/10. - Website at http://peir.path.uab.edu/medintograd/cat_index_29.shtml.

- **Chair of UAB’s Council of Center Directors.** Elected 2008. Served as Chair-Elect in 2009 and Chair in 2010. UAB’s Council of Center Directors is the key convening body for the over 20 University-Wide Interdisciplinary Research Centers on campus that collectively represent on the order of 80% or more of the research conducted at UAB.

- **Creation of Professional Scientist Career Track at the University.** Conceived and led the university-level creation of a career track for professional non-faculty scientists with positions labeled Scientist I through Scientist IV. Approved by University in 2016.
FORMAL LEADERSHIP TRAINING

Successfully completed Leadership Training in the Executive Education program at Duke University’s Fuqua School of Business, 2010.

PATENT(S)


BOARDS of TRUSTEES

- Chairman of the Board of Trustees for the International Life Science Institute, North America, 2013 to 2015.
- Member of the Board of Trustees for the International Life Science Institute, North America, 2002 to present.
- Vice-Chair of the Board of Trustees for the International Life Science Institute, North America, 2011 to 2013.

SERVICE to THE NATIONAL ACADEMIES

Provide regular service to the National Academies, including the National Academy of Sciences and the National Academy of Medicine (of which I am an elected member). Examples follow below.

- Appointed Member to The National Academies of Sciences, Engineering, & Medicine (NASEM) Committee: Reproducibility and Replicability in Science, 2017 -. Produced report. [https://doi.org/10.17226/25303](https://doi.org/10.17226/25303)
- Committee member of the National Academy of Engineering (NAE) project on Promising Practices and Innovative Programs in Responsible Conduct of Research (RCR). 2019-2020.

Invited by the Governing Board of the National Research Council to provide a lecture offering perspective on reproducibility and replicability in research at the May 2017 meeting at the National Academies Keck Center.

Appointed to the Academies’ Committee on Breakthroughs 2030: A Strategy for Food and Agricultural Research, to lead the development of an innovative strategy for the future of food and agricultural research, 2017. Produced report. [https://doi.org/10.17226/25059](https://doi.org/10.17226/25059)

- Consultant to Editor-in-Chief and Deputy Executive Editor of the *Proceedings of the National Academy of Sciences* (PNAS) on checking the statistical analyses of research in question and
charged with drafting new instructions for authors on statistical analysis and reporting guidelines for PNAS, 2017.


- Reviewer for “Fostering Integrity in Research” report of the National Academy of Sciences, 2016.

- Reviewer of report by the Health and Medicine Division of the National Academies of Sciences, Engineering, and Medicine, Committee on Food Allergies: Global Burden, Causes, Treatment, Prevention, and Public Policy, 2016.

- Review of “Toward Science-Based Approaches to Science Communication” by the Committee on the Science of Science Communication: A Research Agenda, Division of Behavioral and Social Sciences and Education, National Academy of Sciences, 2016.

- Reviewer of “Toward Science-Based Approaches to Science Communication” by the Committee on the Science of Science Communication: A Research Agenda, Division of Behavioral and Social Sciences and Education, National Academy of Sciences, 2016.

Member of The National Academies of Sciences, Engineering, and Medicine Intelligence Science and Technology Experts Group (ISTEG) organized to support the Office of the Director of National Intelligence (ODNI), 2015-present. Approved by the US Government to review classified information.


- Reviewer for Institute of Medicine on Consequences of Sodium Reduction in Populations, 2013.


- Appointed Planning Committee Member of the National Academy of Medicine's Interest Group (IG) 12 on Nutrition, Diabetes, and Obesity. December 2012 through November 2013.

- Appointed Chair of the National Academy of Medicine’s Interest Group (12) on Nutrition, Diabetes, and Obesity, beginning on 11/1/13 for a two-year term.

- Appointed Member the leadership team of the National Academy of Medicine’s Interest Group (12) on Nutrition, Diabetes, and Obesity, 2015–2016.

- Appointed Member of the National Academy of Medicine Interest Group Monitoring Committee January 2016 through December 31, 2017.


CONSULTING and ADVISING (selected listing)

**GOVERNMENT (not necessarily an exhaustive listing)**

- Invited member of National Institutes of Health (NIH) Nutrition Research Thought Leader Panel to “provide visionary input in prioritizing gaps and opportunities for strategic planning of nutrition research at the NIH”, 2017.
- By invitation, provided written testimony to the *House Committee on Agriculture* regarding the use of scientific methods to inform policy decisions regarding nutritional matters, including SNAP benefits, February, 2017.
- Advisory Committee Member of the NIH/NIDDK-sponsored Mouse Metabolic Phenotyping Centers (MMPC), 2016 - present
- Special Government Employee for the Food and Drug Administration (FDA), 2015 – present.
- Consultant/Invited Commentator 2016 for the Strategic Review of Nutrition and Human Health research of the UK Medical Research Council (MRC) and the UK National Institute for Health Research (NIHR).
- Consultant to the State of Oregon Department of Justice on the validity of marketed claims in dietary supplements, 2015-2016.
- Consultant to NIH’s Office of the Director on selecting and prioritizing Common Fund Initiatives via the *Innovate to Accelerate* committee, 2015.
- Consultant/Panelist to NIH Obesity Research Task Force Seminar on neuromodulatory therapies for the treatment of obesity, 2015.
- Member of Advisory Board for National Institutes of Health (NHLBI)'s Bed to Bassinet pediatric heart research program, 2010 – 2011.
- Consultant/reviewer for the RAND Corporation on a comprehensive report of the safety and efficacy of ephedra and ephedrine containing products for weight loss funded by the Agency for Health Care Policy & Research, 2002.
- Consultant to the National Institute of Diabetes, Digestive, and Kidney Diseases (NIDDK) of the National Institutes of Health on preparation of the document: *Conquering Diabetes*. 


- Served on a special Public Affairs Task Force of the North American Association for the Study of Obesity (NAASO) to provide information regarding dietary supplements for weight loss to the U.S. General Accounting Office (GAO) – 2002.

- Consultant to the Food and Drug Administration in their oversight and collaborative development of Proctor & Gamble’s post-market surveillance of olestra (Olean); 1996-1997.


- Member of expert advisory panel convened by the Life Sciences Research Office of the Federation of American Societies of Experimental Biology at the behest of the Food and Drug Administration (FDA) to prepare a document advising the FDA as to how to review petitions for new food additives (e.g., macronutrient substitutes), 1996-1999.

- Served on Food and Drug Administration’s (FDA) Scientific Advisory Council to review the fat replacer olestra (sucrose polyester), 1995.

**NON-PROFIT (not necessarily an exhaustive listing)**

- Member of the MD Anderson Cancer Center’s President’s Advisory Board, 2016-2018.

- Served as Panelist-Mentor for The Dannon Institute’s Nutrition Leadership Institute, June 2017.

- Member of Scientific Advisory Board for the Nutrition Science Initiative, 2015 – present.


- Reviewer of draft position statement for the American Society for Nutrition (ASN), 2013.

- Advisor to The David and Lucile Packard Foundation on fructose-related research, 2012.

- Consultant to Consumers’ Union regarding survey design to assess weight loss success associated with various commonly marketed techniques, 2001.

- “Communicator” for the International Food Information Council, an organization whose mission is to help the public and mass media obtain accurate information regarding food-related issues. Responsibilities include giving interviews to members of the mass media, developing educational materials for the general public, and helping to organize conferences; 1995-2008.


- Member of the Advisory Board of the Partnership for the Promotion of Healthy Eating and Active Lifestyles (PPHEAL) a group whose mission is to use scientific knowledge to promote healthier lifestyles in the areas of diet and activity, 1999 to 2000.

- Member of International Life Science Research Institute’s Food Safety and Nutrition Committee, 1997-2000.
• Statistical Consultant to Community Research Initiative on AIDS, 1997.
• Member of the *International Food Information Council*'s Expert Committee, 1995 - ~2010.
• Statistical Consultant to *God’s Love We Deliver* for a project related to the effects of home nutrition on health and quality of life, 1995.
• Statistical Consultant to the International Life Sciences Institute and the United States Department of Agriculture on an experimental assessment of the effects of *trans*-fatty acid consumption.
• Grant writing and statistical consultant to the Milestone School for Child Development, 1991 to 1995.
• Consultant on research design and statistics to the Crossroads School for Child Development, 1995 to 2000.
• Served on the *Obesity & Health* Task Force on Weight Loss Abuse, 1992-1993.

**ACADEMIC/SCIENTIFIC (not necessarily an exhaustive listing)**
• Member of the board-appointed Committee on Science and Technology Engagement with the Public (CoSTEP) for the American Association for the Advancement of Science, 2014 – 2017, reappointed for second term 2017-2020.
• Technical Expert for a Johns Hopkins University Evidence-based Practice Center project on obesity prevention and control, 2016-2017.
• NIH COBRE External Advisory Committee for the Center for Childhood Obesity Prevention (CCOP) at the University of Arkansas for Medical Sciences.
• Member of the External Advisory Committee for the Mid-Atlantic Nutrition Obesity Research Center (NORC) at University of Maryland, 2012-2014.
• Chaired the First International Advisory Board, Department of Human Nutrition, Faculty of Life Sciences, University of Copenhagen, 2010.
• Member of Data Safety and Monitoring Board (DSMB) for Serena Trial for Dr. Robert Ross at Queens University of Canada – 2010 – 2013.
• Consultant to Dr. Zhao Chen of the University of Arizona on design and analysis of genome wide association studies – 2008 to 2012.
• Consultant to Dr. Catherine Kotz of the University of Minnesota on VA-funded and NIH-funded obesity-related research – 2004 - 2009.
• Consultant to Dr. Nir Barzilai of Albert Einstein College of Medicine on NIH-funded aging- and obesity-related research – 2004 - 2007.
• Consultant to Dr. Anil Malhotra of Long Island Jewish Hospital on antipsychotic-induced weight gain – 2005 - 2007.
• Member of External Advisory Board, Yale/NIDA Neuroproteomics Research Center, 2005 – 2006.
• Ad-hoc Member of the Jackson Laboratory’s Board of Scientific Overseers, 2003.
• Member of the External Advisory Committee to the University of Arkansas’ NIH-funded Biomedical Research Infrastructure Network, 2001 - 2003.
• Member of the External Advisory Board to the University of Alabama’s NIH-funded Clinical Nutrition Research Center, 1999 to 2001.
• Consultant to Dr. Julie Mattison, and formerly Drs. Mark Lane, George Roth, and Donald Ingram of the National Institute on Aging for a study of Caloric Restriction and Longevity among Non-Human primates, 1999 to 2013.
• Consultant to Dr. Richard Weindruch of the University of Wisconsin at Madison on program project grant to evaluate the effects of caloric restriction on health and longevity in non-human primates (rhesus monkeys) and related projects, 1998 to 2012.
• Consultant to Dr. Philippe Froguel of the Pasteur Institute on statistical methods for detecting obesity and diabetes genes, 1999.
• Consultant to Dr. David Watkins of the University of Wisconsin at Madison and now University of Miami on the statistical analysis of data regarding the development of HIV vaccines, 1999 to Present.
• Consultant to Dr. Louis Picker of Oregon Health & Science University on the statistical analysis of data regarding the development of HIV vaccines, 2003 to 2006.
• Consultant/Advisory Board member for Dr. Richard Miller’s program project grant “Genetics of Age-Sensitive Traits In Mice” at the University of Michigan, Ann Arbor, 2001.
• Statistical consultant to Dr. Robert Ross of Queen’s University (Canada) on issues related body composition changes with exercise treatment, 1999-2001.
• Statistical consultant to Dr. Howard Pratt of Indiana University School of Medicine on NIH-funded research regarding the genetics of blood pressure regulation, 2000 – 2005.
• Consultant to the National Institute of Diabetes Digestive and Kidney Disease’s research center in Phoenix, Arizona (Drs. Knowler, Tataranni, Ravussin, and Bogardus) on statistical and methodological issues in conducting their genome-wide search for obesity and diabetes genes in Pima Indians. December, 1997 and on general obesity research issues, 2000 - 2005.
• Consultant to Dr. George L. Blackburn of Harvard University on multiple NIH proposals and NIH-funded projects in the 1990s.
• Consultant to Dr. Alan Green of Harvard University on anti-psychotic induced weight gain, 1999 to 2001.
• Consultant to Dr. James Swanson of University of the California at Irvine on Statistical Genetics, 2000.
• Consultant to Dr. Caryn Lerman of the University of Pennsylvania on statistical aspects of pharmacogenetics, 2003- 2006.
• Consultant to NIH grant R21 DK44434 on “Long-term outcome of obesity treatment in minority women” (Principal investigator - George Blackburn, Harvard Medical School).

• Statistical consultant for doctoral students at Hofstra University, Columbia University, Johns Hopkins University, University of Washington at Seattle, Adelphi University, New York University, The New School for Social Research, & Albert Einstein College of Medicine.

• Consultant to Dr. Tim Spector at St Thomas Hospital, Twin Research & Genetic Epidemiology Unit for Wellcome Trust grant “Whole-genome transcriptomic profiling: A resource for the discovery of expression QTLs associated with common disease”, 2007 – ~2009.

LEGAL CONSULTING (not necessarily an exhaustive listing)


• Consultant to Lopez, Hodes, Restaino, Milman & Skikos, A Law Corporation, on obesity-related litigation, 2004 - 2009.


• Consultant to Gibson, Dunn & Crutcher LLP, a Los Angeles, California law firm, 2002 - 2006.

• Consultant to Parenti, Falk, Waas, Hernandez & Cortina, Attorneys at Law, regarding obesity-related litigation, 2002.

• Consultant to Paterson, MacDougall, a Toronto, Canada law firm serving both domestic and international clients, regarding obesity related issues, 2000 - 2001.

• Consultant to Wilentz, Goldman, & Spitzer, Attorneys at Law regarding OTC weight-loss product claims litigation, 1999-2008.


• Consultant to Spadoro & Hilson, Attorneys at Law regarding actuarial lifetable estimation for obese decedents, 1998.

OTHER INDUSTRY (not necessarily an exhaustive listing)

• Chair of research grants committee, Dry Bean Health Research Program for the Northharvest Bean Growers Association, 2008 – present.

• Chair of United Soybean Board’s research grants committee, 1999 – 2017.
- Chairperson for the Pfizer Visiting Professorships in Obesity Academic Advisory Board, 2009 - 2011.

- Member of the United Soybean Panel’s Nutrition Advisory Board, 1996 - 2006.


- Member of Scientific Advisory Board for MediFast, Inc, 2009.


- Member of Scientific Advisory Board for Biofortis, Inc., 2016 – present.

- Member of Scientific Advisory Board for Ikea, 2016 - 2018.


Allison, D.B. (principal investigator) et al. Energetics, Disparities, & Lifespan: A unified hypothesis. R01AG043972. A Transformative R01 from the National Institutes of Health. 9/2012 - 5/2020. $8,000,000 (approximate total costs). This grant application addresses evolutionary genetic hypotheses involving obesity, social disparities, and longevity.


GRANTS with CONSULTING ROLES


GRANT APPLICATIONS AWAITING FINAL ADMINISTRATIVE APPROVAL FOR FUNDING (not necessarily exhaustive or fully updated– see other support pages for more updated listing)


GRANT APPLICATIONS in REVIEW (not necessarily exhaustive or fully updated– see other support pages for more updated listing)


**PAST GRANTS (not necessarily an exhaustive listing)**


Allison, D. B. et al. (principal investigator), et al. Supplement to UAB Nutrition Obesity Research Center to Identify aspects of the reporting and conduct of murine obesity-related research that can use improvement, and provide ways to improve at least one aspect of such research: statistical analysis. P30DK056336. Funded by the National Institutes of Diabetes Digestive and Kidney Diseases. Budget Period: 06/01/2016 – 05/31/2018. Total costs, $100,000.


Allison, D. B. (principal investigator) & Brown, A. W. (principal investigator – multi-PI grant). Beyond textbook, yet simple, statistical tools for reproducible animal research (R25GM116167). A grant to develop training modules and educational materials that address commonly encountered but unexpectedly complex statistical and research design issues for the NIH. Funded by the National Institute of General Medical Sciences (NIGMS) of NIH. Project Period: 9/10/15 – 8/31/17. Year 1 direct costs $73,505.


Allison, D. B. (principal investigator) & Neale, M. C. Robustness of Maximum Likelihood-Based Variance Components Tests of Genetic Linkage For Quantitative Traits When Data Are Not Normally
Distributed. A grant funded by the Pittsburgh Supercomputing Center for supercomputing time (no dollar amount requested) through NIH grant 2P41RR06009-110234. Period: 3/1/98 – 7/31/05.


Allison, D. B. (principal investigator) et al. Baseline levels of obesity and weight gain among patients taking antipsychotic medications: A comprehensive quantitative literature synthesis. A grant from Pfizer, Inc. Period: 12/1/96 - 6/1/96. Total Amount: $15,000 (direct costs).


Allison, D. B. (principal investigator), & Shikany, J. Randomized Controlled Trial of MediFast Program for Weight Loss. Funded by MediFast. Total Amount: ~$400,000 (total costs). Period: 09/01/10 - 08/31/12.


Allison, D. B. (principal investigator), et al. Does Weight Loss Reduce Mortality Rate among Obese Rats? An R01 grant funded by the National Institutes of Health. Total Amount: $700,000 (direct costs). Period 1/15/00 – 1/31/01.


Allison, D. B. (principal investigator), et al. Short Course on Statistical Genetics and Statistical Genomics. Funded by the National Science Foundation. Period: 2 years. Amount: ~$300,000 (total costs). Period: 10/01/07 – 09/30/09


Allison, D. B. (principal investigator), et al. UAB STATISTICAL GENETICS POST-DOCTORAL TRAINING PROGRAM. A T32HL079888 post-doctoral training grant funded by the National Heart, Lung, and Blood Institute. Total Annual Amount: ~$350,000 (total costs). Period: 04/15/03 - 03/31/11.


Allison, D. B. (principal investigator), Heymsfield, S. B., & Heshka, S. A Randomized Controlled Clinical Trial of a Novel Soy-Based Meal Replacement Formula for Weight Loss Among Obese Individuals. Funded by NutriPharma. Total Amount: $170,000 (total costs). Period: 3/1/00 – 3/1/01.


Allison, D. B. (principal investigator), Heymsfield, S.B., & Pi-Sunyer, F.X. The genetics of resting metabolic rate in relation to adiposity: A twin study. A grant of 500 bed days as part of a General Clinical Research Center (GCRC) grant from the NIH through Columbia University College of Physicians Surgeons.

Allison, D. B. (principal investigator), Laying the Foundation for the Alabama Obesity Institute Funded by the Alabama Department of Economic and Community Affairs. Total Annual Amount: ~170,025 (total costs). Period 03/01/10 – 08/31/13 (NCE)


Allison, D. B. (principal investigator). *Genetics of NIDDM, Obesity and Related Risk Factors Among Black Women*. A Career Development Award from the American Diabetes Association. Period: 1/1/94-12/31/96. Total direct costs: **$225,000** [Award returned on 9/1/94 upon receipt on FIRST award from the National Institutes of Health].


Allison, D. B. (principal investigator). *Genetics of Obesity and Related Risks Among Black Americans*. An Investigatorship Award offered by the New York City Affiliate of the American Heart Association. Total direct costs: **$90,000**. Award returned due to receipt of overlapping award from American Diabetes Association.


Allison, D. B. (principal investigator). *Design, Analysis, & Interpretation of RCTs in Obesity*. Funded by the National Institutes of Health (R13DK077555). Total Amount: **$25,000**. Period: 11/01/06 - 10/31/07.


Allison, D. B. (principal investigator). *Genetics of Obesity and Related Risk Factors Among Black Women*. A minority supplement to a FIRST Award from the National Institutes of Health (NIDDK) to support Elizabeth Manibay, a minority graduate student. Period: 6/10/96-8/31/96. Total Amount: **$7,000** (direct costs).


Allison, D. B. Awarded $1000 grant from the National Science Foundation to attend NATO Advanced Study Institute #115/91 on "Methodology for Genetic Studies of Twins and Families," September, 1991, Leuven, Belgium.

Allison, D. B. et al. (principal investigator, director), et al. UAB Nutrition Obesity Research Center, P30DK056336. Funded by the National Institutes of Diabetes Digestive and Kidney Diseases. Approximate yearly direct costs: $852,858. Period: 01/01/00 - 06/30/17.

Allison, D. B. Sub-contract to Johns Hopkins Clinical Trial of Olestra as an Aid to Weight Maintenance to provide statistical support. Funded by the Proctor & Gamble Company. Period: July 1, 1999 to June 30, 2002. Total Amount: $16,900 (direct costs).


Allison, D.B. et al. (principal investigator [titular]), Dhurandhar, E. (Co-I; functionally PI). The role of Protein in regulating ad libitum energy intake in humans. Funded by the Egg Nutrition Research Center (ENRC). Approximate yearly direct costs: $126,010. Period: 12/01/14 – 11/30/16.


Baskin, M….Allison, D. B. (co-investigator). Impact of Fruit and Vegetable Cost on Obesity in Children and Parents. Funded by an anonymous private philanthropist. Total costs: ~$50,000 (Total costs). Period: 05/01/04-6/30/07.


Emanu el, P…Allison, D. B. (co-investigator). Comprehensive Cancer Center Core Support Grant. A P30 grant funded by the National Institutes of Health. Period. 04/01/05-03/31/10. Total amount: $37,597,934. [Removed from grant after 1st year due to budget cuts].


Heimburger D. C. ….Allison, D. B. (co-investigator/switched to consultant). Reimbursement effects on enrollment in obesity treatment. R03DK067357 funded by the NIH/NIDDK. Period: 01-AUG-2004 to 30-JUN-2006. Amount: $100,000 (total direct costs).


Huang, LS, Chua, S., & Allison, DB (co-investigator/switched to consultant). Regulation of ApoB Secretion in Inbred Mouse Strains. A proposal funded by the National Institutes of Health. Period: 4/1/00 – 3/31/04. Amount: $1,000,000 (direct costs).


Kaslow, R. …& Allison, D. B. (co-investigator). Genetic factors in the epidemiology of HIV-1 infection. A proposal funded by the National Institute of Health. Total Amount: $2,835,056 (direct plus indirect costs). Period: 12/1/01 - 11/30/06. [Withdrew from grant due to over-commitment – replaced by Varghese George].


Kimberly, R. P.,....& Allison, D. B. (co-investigator/Pl of statistical genetics core). Program Project in the Genetics of SLE. Funded by the National Institute of Arthritis and Musculoskeletal and Skin Diseases. Total Amount: $5,000,000 (approximate direct costs). Period: 09/24/02 - 08/31/07.


Lerman, C….Allison, D. B. (co-investigator). Transdisciplinary Tobacco Use Research Center. A P50 grant funded by the National Institutes of Health. Period: 09/01/04 - 08/31/09. UAB subcontract amount $108,750 (over 5 years). [Removed from grant after 2nd year due to budget cuts].


Pi-Sunyer, F. X., ... Allinson, D. B. (co-investigator/switched to consultant), et al. Obesity Research Center. A P30 (center grant) grant funded by the National Institute of Diabetes, Digestive, and Kidney diseases. Period: 5/1/00-5/1/05. Amount: $5,000,000 (direct costs).

Pi-Sunyer, F. X., Allinson, D. B. (co-investigator), et al. The NIDDM Primary Prevention Trial. Funded by the National Institutes of Health. Total Amount: $2,043,926 (direct costs).


Saag, K.G....Allinson, D.B. (co-investigator). UAB Center for AIDS Research (CFAR). A center grant proposal P30AI27767 funded by the National Institutes of Health/National Institute of Allegory and Infectious Disease. Total costs: $480,000 (Total costs). Period: 03/01/09 - 02/28/14. [Withdrew from grant due to over-commitment – replaced by Gary Cutter].


Weindruch, R. H., Allison, D. B. (co-investigator). Gene Expression Profiling, Oxidative Stress, and Aging. An R01 funded by the National Institutes of Health. Total Amount: $2,170,097 (total costs). Period: 12/01/00-11/30/06.


Zhang, K., Allison, D. B. (co-investigator). Haplotype analysis in linkage disequilibrium mapping. An R01 proposal submitted to the National Institutes of Health – received 2.5 percentile. Total amount $1,017,363 (direct plus indirect costs). Period: 07/01/06 – 06/30/10.

Zhu, S., Allison, D. B. (co-investigator). Obesity-related variables and motor vehicle injury. An R01 funded by the National Institutes of Health (R01EB006552). Total amount $915,528 (total costs). Period: 7/01/07 – 06/30/10
PUBLICATIONS IN PEER REVIEWED JOURNALS


   i. An abridged version was reprinted in the *Journal of Group Psychotherapy, Psychodrama, and Sociometry, 46*, 83-109.


44. Selected for indexing in the NHS Centre for Reviews and Dissemination (see: http://nhscrd.york.ac.uk/)


Analyses In The Presence Of Confounding Due To Occult Disease: The Example Of Body Mass Index. Annals of Epidemiology, 9, 132-142.


111. Chung, W K; Luke, A; Cooper, R S; Rotimi, C; Vidal-Puig, A; Rosenbaum, M; Chua, M; Solanes, G; Zheng, M; Zhao, L; Leduc, C; Eisberg, A; Chu, F; Murphy, E; Schreier, R; Aronne, L; Capitio, S; Kahle, B; Gordon, D; Leal, S M; Goldsmith, R; Andreu, A L; Bruno, C; Dimauro, S; Heo, M; Lowe Jr, W L; Lowell, B; Allison, D B; Leibel, R L (1999). Genetic and Physiological Analysis of the role of UCP3 in Human Obesity and Energy Homeostasis. Diabetes, 48(9), 1890-1895.


the life span with longevity and morbidity. Journal of Gerontology, Series A, 56 (special issue 1); 7-19.


i. Comment in:


thymidylate synthetase (TS), ubiquitin specific protease 10 (USP10) and surviving is associated with poor survival in glioblastoma multiforme (GBM). *Journal of Neuro-Oncology, 80*(3):261-74.


i. Highlighted in Nature Clinical Practice Endocrinology & Metabolism March 2009 Vol 5 No 3.


i. Paper the Editor(s)-in-Chief of BioData Mining as a nomination of the 4th Annual Research Awards. http://www.biomedcentral.com/researchawards/.


i. Recognized at 2012 AJPM Board of Governors’ meeting as one of the Top 15 articles contributing to AJPM’s 2010 Impact Factor.


i. Among the 10 Most Popular Articles in COBRA* as of 5/27/09. See


i. Article received substantial media coverage and was selected and evaluated by the Faculty of 1000 (F1000), which places our work in their library of the top 2% of published articles in biology and medicine.


497. Article received substantial media coverage and was written up on MDLinx: http://www.mdlinx.com/gastroenterology/news-article.cfm/5334129/.

498. According to Altmetric, as of October 2014: “Altmetric has tracked 2,487,155 articles across all journals so far. Compared to these this article has done particularly well and is in the 97th percentile: it’s in the top 5% of all articles ever tracked by Altmetric.”


500. Article received substantial media coverage and was written up on MDLinx: http://www.mdlinx.com/nurse-practitioner/news-article.cfm/5319122/


i. Article received substantial media coverage and was written up on MDLinx: http://www.mdlinx.com/nursing/news-article.cfm/5364649/


i. Featured on MDLinx.com: [http://www.mdlinx.com/internal-medicine/news-article.cfm/5838269/obesity](http://www.mdlinx.com/internal-medicine/news-article.cfm/5838269/obesity)


i. Featured on MDLinx.com: [http://www.mdlinx.com/internal-medicine/news-article.cfm/5838268/energy-intake](http://www.mdlinx.com/internal-medicine/news-article.cfm/5838268/energy-intake)


iii. See also: "Authors' response to LTE for 'Energy Balance Measurement: When Something is Not Better than Nothing'".


i. Featured on MDLinx.com: [http://www.mdlinx.com/internal-medicine/news-article.cfm/5838268/energy-intake](http://www.mdlinx.com/internal-medicine/news-article.cfm/5838268/energy-intake)


iii. See also: "Authors' response to LTE for 'Energy Balance Measurement: When Something is Not Better than Nothing'".


   1. Selected as the Editor’s Pick for Volume 102 Issue 5 of the journal.
   2. Nominated for the 2016 Charles C. Shepard Science Award (Assessment) offered by the Centers for Disease Control and Prevention (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR).


Books and Book Chapters


5. Allison, D. B., & Engel, C. Predicting Treatment Outcome: Why have we been so unsuccessful.


SELECTED SPEECHES


OTHER PUBLICATIONS


In response, paper we commented upon was retracted. [http://online.liebertpub.com/doi/abs/10.1089/chi.2014.1062.


- Rated as 5th most popular article in 2018: https://www.americanscientist.org/blog/from-the-staff/2018s-most-popular-articles


151. Golzarri-Arroyo, L., Oakes, J.M., Brown, A.W., & Allison, D.B. (in press). Analysis of Cluster-Randomized Trial That Do Not Take Clustering and Nesting Into Account are Incorrect and Likely to Lead to Published P-values that Are Too Small: Comment on “A School-Based, Peer-Led, social Marketing Intervention to Engage Spanish Adolescents in a Healthy Lifestyle ('We
are Cool’ – Som la Pera Study): A Parallel-Cluster Randomized Controlled Study.”
[Letter/commentary]. *Childhood Obesity.*


**SUBMITTED FOR PUBLICATION/UNDER REVISION**


7. Kahathuduwa, C. N., Thomas, D. M., Siu, C., & Allison, D. B. *Due to Regression to the Mean, the Published Conclusion of “We Run This City: Impact of a Community–School Fitness Program on Obesity, Health, and Fitness” Regarding Effects on BMI Cannot Be Substantiated.* [Letter/commentary].


13. Mehta, T. M., Keith, S. W., & Allison, D. B. *To Break the Obesity-Mortality Tug-of-War, We Need Different Data More so Than More Data.*


in "Intervention effects of a kindergarten-based health promotion programme on obesity related behavioural outcomes and BMI percentiles."


29. Golzarri Arroyo, L., Brown, A.W., Dickinson, S.L., Mayo-Wilson, E., Oakes, M., Vassar, M., Vorland, C.J, & Allison, D.B. In a cluster randomized trial, the appropriate prespecified analysis was replaced with an incorrect analysis without justification and the conclusions of the trial are therefore unsubstantiated: Comment on 'Effectiveness of a Normative Nutrition Intervention in Chilean Pregnant Women on Maternal and Neonatal Outcomes: The CHiMIncS Study.' [Letter/commentary].

PUBLISHED F1000 RECOMMENDATIONS (NOT NECESSARILY AN EXHAUSTIVE LISTING)


PRESENTATIONS PUBLISHED as ABSTRACTS (not an exhaustive list)


2. Dawson JA, Kaiser KA, Affuso O, Cutter G and Allison DB. A Bayesian meta-analytic study of whether rigorous control conditions diminish treatment effects in weight loss randomized clinical trials. [abstract]. Oral presentation from 2013 The Obesity Society Meeting; Atlanta GA.


4. Lewis DW, Affuso O, Dutton GR, and Allison DB. Physical Characteristics Associated with Weight Underestimation among Overweight and Obese Men: NHANES 1999-2006. [abstract]. Oral presentation from 2013 The Obesity Society Meeting; Atlanta GA

5. Singh J, Vazquez AI, Reynolds R, Srinivasaasainagendra V, and Allison DB. Association of BMI, 8 SNPs Reported to Be Related to Gout Phenotype and Their Interaction in Gout Incidence in Framingham Heart Study. [abstract]. Poster from 2013 The Obesity Society Meeting; Atlanta GA


8. Keating KD, Dhurandhar EJ, Kaiser KA, Thomas AS, and Allison DB. Empirically Informed Predictions of Human Adult Body Weight Change in Response to Energetic Perturbations. [abstract]. Poster from 2013 The Obesity Society Meeting; Atlanta GA


12. Mehta T and Allison DB Modeling Obesity Associated Years of Life Lost: A Significance Test to Compare Predictive Accuracies of Non-Nested Models. [abstract]. Poster from 2013 The Obesity Society Meeting; Atlanta GA


22. Robertson HT, de los Campos G, Fontaine KR, Allison DB. Turning the Analysis of Risk Factor Mortality Associations Upside Down: Modeling Years of Life Lost Through a Novel Family of


29. Tapan Mehta, Nick Pajewski, Scott Keith, Kevin Fontaine, David B. Allison. Plausible ‘Nuisance’ Contributor to Decreasing Deleterious Association of Overweight and Obese on Mortality Rate over Calendar Time. Joint Statistical Meetings in Vancouver, BC, Canada. 3rd August 2010


86. Heshka, S; Puranyitya, M; Shen, W; Chatterjee, P; Gallagher, D; Albu, J; Allison, DB; Heymsfield, SB. 2004. Inter-reader reliability in reconstructing tissue volumes from magnetic resonance images. FASEB JOURNAL, 18 (4): A177-A177 Suppl. S.


96. Reveille, JD; Beasley, TM; Tan, FK; Roseman, JM; Vila, LM; Bastian, HM; Fessler, BJ; Baethge, BA; McGwin, G; Allison, DB; Alarcon, GS. 2003. Admixture as a measure of genomic control. Data from a multiethnic lupus cohort. ARTHRITIS AND RHEUMATISM 48 (9): S225-S225, Suppl. S.


100. Hsu, HC; Li, LN; Yi, NJ; Zhang, HG; Yang, PA; Zhou, JL; Wu, Q; Lu, L; Allison, DB; Williams, RW; Mountz, JD. 2003. Genomic analysis of age-related thymic involution. FASEB JOURNAL 17 (7): C241-C241, Suppl. S.


104. Shete, SS; Beasley, TM; Etzel, CJ; Fernandez, JR; Chen, J; Allison, DB; Amos, CI. 2002. Effect of winsorization on power and type 1 error of variance components and related methods of QTL detection. AMERICAN JOURNAL OF HUMAN GENETICS, 71 (4): 571-571, Suppl. S.


106. Beasley, TM; Fernández, JR; Albu, J; Rafla-Demetrosius, N; Shriver, MD; Niclas, B; Weinsier, RL; Allison, DB. Using Reciprocal BMI For Examining African Genetic Admixture Associations With Obesity. International Journal of Obesity, 2002;26(Suppl 1)S84.


111. Coffey CS; Steiner DJ; Baker BA; Mullinax C; Allison DB. Safety of an herbal formulation including ephedra alkaloids dosed intermittently or continuously for weight control. FASEB JOURNAL 2002, Vol 16, Iss 4, pp A649-A649.


113. Hsu HC; Zhang HG; Allison DB; Young PA; Geiger H; Van Zant G; Mountz JD. Peripheral T-cell response to anti-CD3 stimulation correlates with longevity in C57BL/6J X DBA/2 recombinant inbred strains of mice. FASEB JOURNAL 2002, Vol 16, Iss 4, pp A695-A695.


**PRESENTATIONS (selected)**


28. Allison, D.B. Tue 2/26/2013. Invited speaker as part of UAB’s Donaldson Lecture Series at the Donaldson Correctional Institute: Title "Fallacies of weight control"


54. Allison, D. B. Ideas from the Outlands: Contributors to Obesity from (A)mbient Temperature to (Z)oonitic Viruses. Invited lecture delivered at the Canadian Society for Exercise Physiology (CSEP), November, 2010.


57. Allison, D. B. *Obesity: A Look Through the Kaleidoscope*. Invited lecture delivered at Zhejiang University, School of Public Health, Hangzhou, China, April, 2010.


77. Allison, D. B. (Feb, 2006). Genetic and Environmental Influences on Obesity. Invited lecture for Dr. Douglas Ruden's Environmental Health Masters Level Seminar (ENH 695/791) @ UAB. Birmingham, AL.


80. Allison, D. B. (Nov, 2005). Obesity and Mortality Rate. Invited lecture at Morehouse School of Medicine's CVRI Lecture Series. Atlanta, GA.


102. Allison, D.B. (December, 2003). Design & Analysis of Microarray Studies. Invited lecture delivered to the Emory University School of Medicine, Dept of Human Genetics, Atlanta, GA.


130. Allison, D. B. (April, 2003). Use of Microarrays for Pharmacogenomics Research. An Invited Lecture delivered at Indiana University’s Division of Clinical Pharmacology in the Department of Medicine, Indianapolis, IN.

131. Allison, D. B. (April, 2003). Design & Analysis of Microarray Studies. An Invited Lecture delivered at Indiana University’s Indiana University School of Medicine Department of Endocrinology & Medical & Molecular Genetics, Indianapolis, IN.


156. Allison, D. B. (February, 2000). Research Directions in Antipsychotic Induced Weight Gain. An invited address delivered at the University of Innsbruck.


159. Allison, D. B. (December, 1999). Genetic & Environmental Influences on Obesity. An invited address (Grand Rounds) delivered to the Department of Psychiatry, Medical College of Virginia.


175. Allison, D. B. (1998, April). The Genetics of Obesity from an Environmental Point of View. An invited address delivered at the Grand Opening of the University of Maryland’s Josslyn Center for Diabetes.


204. Allison, D. B. (October 1995). *Interpreting epidemiological research*. An invited address delivered at the annual meeting on journalistic reporting of epidemiological research hosted by the Boston University School of Journalism.


Selected Classroom Teaching Experience

University of Alabama at Birmingham, Birmingham, AL
Professor 2014
Co-designed, co-led, and lectured in course on Energetics: Scientific Foundations of Obesity and Other Health Aspects UAB’s School of Public Health with Dr. Emily Dhurandhar as co-director.

University of Alabama at Birmingham, Birmingham, AL
Professor 2007
Co-designed, co-led, and lectured in course on statistical methods for students enrolled in UAB’s Howard Hughes Medical institute training program with Drs. Dimmit and Tiwari as co-directors.

St. John’s University, Queens, NY
Adjunct Assistant Professor Jan. 1992 - June 1992
Taught graduate course in Multivariate Statistics for psychology Ph.D. candidates.

Hofstra University, Hempstead, NY
Adjunct Faculty Jan. 1990 - August 1990
Taught undergraduate courses in Social, Adolescent, and Introductory Psychology.

Nassau Community College, Garden City, NY
Adjunct Faculty May 1990 - July 1990
Taught undergraduate courses in Introductory Psychology.

St. John’s University, Queens, NY
Adjunct Faculty Jan. 1990 - May 1990
Taught undergraduate course in Tests and Measures.
Clinical Experience

PLUS Group Homes, Westbury, NY  
Applied Behavior Specialist  
Aug. 1988 - April 1990

Developed and implemented behavior modification programs for autistic/retarded adults living in residential units. Designed and implemented staff training and organizational behavior management systems. Initiated research program. Performed psychological evaluations.

Astor Child Guidance Center, Bronx, NY  
Intern Psychologist  

Provided group and individual therapy to severely emotionally disturbed children and their families in a day treatment hospital. Provided consultation to classroom teachers in the shaping of classroom behavior through operant procedures.

Farmingdale School District, Farmingdale, NY  
Intern Psychologist  
Sept. 1987 - June 1988

Provided psychological and educational evaluations and counseling for elementary and junior high school students.

Mercy Hospital Community Residence, Wantagh, NY  
Mental Health Assistant  

Assisted out-patients with histories of major mental disorders in adapting to life outside a hospital, maintaining a home, and becoming integrated into the community.

St. Francis Hospital, Roslyn, NY  
Psychiatric Assistant  

Assisted psychiatric staff in providing care and therapy for adult in-patients with acute mental disorders.

Blueberry Treatment Center, Brooklyn, NY  
Child Care Worker  
July 1985 - Aug. 1986

Responsible for primary care, counseling, and therapeutic intervention with severely disturbed children ages four to seventeen.

Physician's Weight Loss Center, Hicksville, NY  
Behavior Therapist  
Sept. 1985 - March 1986

Provided group and individual counseling, behavior modification lectures, and psychological screenings for massively and morbidly obese adult outpatients.

Lifeline Center For Child Development, Queens, NY  
Substitute Teacher  
April 1986 - June 1986

Assumed teacher responsibilities for emotionally disturbed children of various ages.
EDITORIAL & REFEREEING EXPERIENCE

Editorships

**Obesity & Nutrition Related Journals**

- Associate Editor of *Obesity*, 2007 – present.
- Associate Editor, *Surgery for Obesity and Related Diseases*, 2008 – present.
- Editorial Board Member for:
  - *Advances in Nutrition and Food Technology*, 2014 - present
  - *ISRN Obesity*, 2012 - present.
  - *Obesity Reviews*, 2000 - present.
- Guest Associate Editor for *Obesity*, 2007.

**Genetic Journals**

  Frontiers in Genetics indexed in JCR and received its first **impact factor 3.789** in 2017.
  Listed as Founding Field Chief Editor (emeritus), 2018 – present.
- Editorial Advisory Board Member for *Recent Patents on DNA & Gene Sequences*, 2008 - 2011.
- Co-edited special issue of *Behavior Genetics* on the Genetics of Obesity, August, 1997.
**Statistical Journals**

- Associate Editor for *Computational Statistics and Data Analysis*, 2003 - 2011.
- Co-edited special issue of *Statistics and Its Interface* on Statistical Genetics, 2011.

**Other Journals**

- Editorial Board Member for *European Journal of Clinical Investigation*, 2009 - present.
- Honorary Editorial Board Member: *Evidence-Based Preventive Medicine*, 2003 – present.
- Associate Editor for *PeerJ*, 2012 – 2015.
- Special Issue Co-Editor for issue on “Perspectives in Aging: Mechanisms Nutritional Interventions” in *Experimental Gerontology*.

**Journal & Book Reviewing**

Grant, Conference, & Other Reviewing (selected)

- **1990.** Served on Selection Committee for television entries for the American Association for the Advancement of Science - Westinghouse Science Journalism 1990 Awards.
- **1994.** Proposal Reviewer for the American Psychological Association's 1994 Convention (Division 5) and 1998 convention (Division 38).
- **1995.** Grant reviewer for the University of Colorado's Center for Research in Clinical Nutrition's Pilot and Feasibility Program (1995).
- **1995-2000.** Grant reviewer for the New York Obesity Research Center’s Pilot and Feasibility Program (1995; 1999, 2000);
- **1997-1998.** Grant reviewer for the United Soybean Board (1997-1998);
- **1999 – 2017.** Chair of the United Soybean Board’s grant review committee 1999 – 2017.
- **1999.** Grant reviewer for the Austrian *Fonds zur Förderung der wissenschaftlichen Forschung* (1999).
- **1999-2002.** Grant reviewer for the International Life Sciences Institute Future Leader’s Award (1999 - 2002).
- **2000.** Ad hoc reviewer for NIH Cardiovascular Disease Study Section (2000).
- **2000.** Ad hoc reviewer for NIH Nutrition Study Section (2000).
- **2000.** Grant reviewer for the Wellcome Trust & Juvenile Diabetes Foundation Joint Funding Program (2000).
- **2002.** Grant reviewer for Genome Canada, a not-for-profit corporation established through funding from the federal government of Canada (2002).
- **2002-2005.** Grant reviewer for the University of Alabama at Birmingham’s Comprehensive Cancer Center pilot & feasibility grants program (2002 - 2005).
- **2004.** Ad hoc reviewer for the NIH Look AHEAD study’s ancillary projects program (2004).
- **2004.** Grant proposal reviewer for National Science Foundation CAREER proposal.
- **2004.** Grant proposal reviewer for National Science Foundation *FIBR* proposal, 2004.
- **2004.** Reviewer for the University of South Carolina’s intramural research promotion grants (2004).
- **2009.** Chair of NIH (NIDDK) Special Study Section for R24 grant review 11/16/2009.
- **2009.** Grant reviewer for t Clinton Foundation and the Solae Company for proposals to develop novel ready to use therapeutic foods for developing countries - 2009.
- **2009.** Grant reviewer for UAB’s Minority Health Research Center – 2009.
• 2010. Ad hoc statistical reviewer/advisor to the Molecular Genetics B Study Section [MGB], 2010, National Institutes of Health.
• 2010. Grant proposal reviewer for National Science Foundation regular grant 2010.
• 2012. Peer Reviewer for Croucher Foundation, Hong Kong.
• 2012. Nominator for National Award Program for Creativity.
• 2012. Reviewer for NIH Pioneer Award applications.
• 2013. Reviewer for NIH Loan Repayment Plan applications.
• 2014. Reviewer for NIH Pioneer grant applications.
• 2015. Abstract reviewer for the Gerontological Society of America’s 68th Annual Scientific Meeting.
• 2015. Served as grant reviewer for The Leverhulme Trust of the United Kingdom.
• 2015. Abstract reviewer for The Gerontological Society of America.
• 2015. Reviewer for an analysis and research management support report to be published by the National Center for Education Research.
• 2016. Grant reviewer for the Centers for Disease Control and Prevention (CDC).
• 2016. Grant reviewer for ZonMw – The Netherlands Organisation for Health Research and Development.
• 2017. Reviewer of grant proposals for the Laura and John Arnold Foundation.
• 2017. Reviewer of intramural research program for NIH (NIDDK) investigator(s).
• 2017. Reviewer for the Evidence-based Practice Center Evidence-based Practice Center Program of the U.S. Agency for Health Research and Quality.

INTRAMURAL COMMITTEE & SERVICE WORK (selected)

• Member of Indiana University Advisory Board of the Institute for Advanced Study (IAS), July 1, 2019 – June 30, 2022.
• Member Indiana University School of Medicine’s Center for Diabetes and Metabolic Diseases (CDMD) in the Nutrition and Physiology of Obesity interest group.
• Internal Advisory Committee (IAC) member for Indiana University Developmental Center for AIDS Research (D-CFAR) August 2018 application submission.
• Member of University-wide Council for Innovation and Entrepreneurship. The overarching purpose for the Council is to ensure that UAB continues to cultivate a campus-wide entrepreneurial spirit among students, faculty and staff that builds upon past successes and creates opportunities that will profoundly impact UAB, Birmingham, Alabama and beyond, 2017 - 2017.
• Member of University-wide committee to develop integrated plan for training in responsible conduct of research for all students in UAB from undergraduate through post-doctoral, 2016 - 2017.
• Co-Chair of Intellectual Property and Tech Transfer Committee of the UAB Council of Center Directors, 2017 – 2017.
• Member of Dean of Graduate School’s University Wide Committee to Determine Policies for Distributing Graduate Fellowships, 2017.
• Chair of School of Health Professions Committee on Enhancing Statistical Support and Teaching within the school, 2017.
• Member of UAB School of Public Health Diversity Committee, 2015 – 2016.
• Chair of UAB School of Public Health Committee to Increase Enrollment in Masters Programs, 2005 – 2006.
• Chair of UAB School of Public Health Research Advisory Council, 2005 – 2016.
• Chair of UAB’s Council of Center Directors – Chair in 2010, Chair-Elect in 2009.
• Member of Search Committee for UAB’s Comprehensive Diabetes Center Director, 2009 - 2010.
• Co-Director, Genetic Core of Minority Health and Research Center, 2002 - 2005.
• Member of committee to review applications for University-Professors (a special honorific designation within UAB) - 2008.
• Member of internal advisory committee for Dr. Suzanne Oparil’s post-doctoral training program in CVD biology.
• Member of Search Committee for Comprehensive Cancer Center Director, 2005-2007.
• Member of Search Committee for Department of Epidemiology faculty, 2004 - 2005.
• Member of Search Committee for UAB’s Associate Dean for Postdoctoral Education, 2006 -2007.
• Member of Search Committee for UAB’s Comprehensive Cancer Center Director, 2005 - 2007.
• Member of Search Committee for UAB’s Department of Nutrition Sciences Department Chair, 2001-2002.
• Member of Search Committee for UAB’s Department of Nutrition Sciences Endowed Webb Chair, 2008 - 2009.
• Member of Search Committee for UAB’s Department of Nutrition Sciences, 2003-2004.
• Member of Search Committee for UAB’s School of Public Health Associate Dean, 2003 – 2004.
• Member of the Executive committee of the Center for Nutrient Genome Interaction, 2003 - 2009.
• Member of the Executive committee of the Heflin Center for Human Genetics, 2002 - 2005.
• Member of the Leadership Committee of the NIH-Funded Diabetes Research and Training Center, 2008 - 2017.
• Member of the Steering Committee of the UAB Comprehensive Diabetes Center, 2008 - 2017.
• Member of the UAB School of Public Health Faculty Affairs Committee, 2001 - 2003.
• Member of UAB University-Wide Office of Grants & Contracts Oversight Committee, 2003 - 2005.
• Member of UAB’s Comprehensive Cancer Center Institutional Research Grant Committee, 2001 – 2004.
• Member of UAB’s University-Wide Research Advisory Group, 2005 – 2017.

ORGANIZATIONAL AFFILIATIONS & APPOINTMENTS

• Academy of Behavioral Medicine Research, 2017 - present.
• American Aging Association, 2015 - present
• Association for Advancement of Behavior Therapy (AABT).
• American Association for the Advancement of Science (AAAS), 1989 – present.
- Elected as Fellow, 2009.
- American Diabetes Association (ADA)
- American Heart Association (AHA), 2006 – Present
  - Elected fellow 2015.
  - Silver Heart Member, 2017 – present.
- American Psychological Association (APA)
  - Member of Division 38 - Health Psychology
  - Member of Division 5 - Measurement & Statistics
- American Public Health Association (APHA)
  - Appointed the 1st American Public Health Association (APHA) Ethics SPIG Nominations Chair in 2014 - 2016.
- American Society for Human Genetics (ASHG)
- American Society of Nutrition (ASN) (formerly American Society for Clinical Nutrition (ASCN)
  - Elected Member of Nominating Committee, 2003.
  - Member of Education/Mentoring awards nominating committee – 2008-2009
  - Member of Graduate & Continuing Education Committee – 2008-2009.
  - Member of the Public Policy/Public Information Awards Nominating Committee for 2010.
  - Elected to the Nutritional Sciences Council’s Executive committee as NSC Human Nutrition Representative, 2013. Term: June 2013 through May 2015.
  - Elected as Chair Elect of Obesity Research Interest Section, 2014.
  - Appointed to serve as a member of the 2016 Gilbert A. Leveille Award and Lectureship Jury. This is a joint award administered by IFT and the American Society for Nutrition.
  - Appointed to serve on search committee for 2016 Atwater Award Lecturer.
- American Statistical Association (ASA)
  - Elected as Fellow, 2007.
- Association for Women in Science (AWIS)
- Behavior Genetics Association (BGA)
- Classification Society of North America (CSNA)
- Committee for Skeptical Inquiry – 2014 to Present
- Eastern Psychological Association (EPA) – membership not current.
- Gerontological Society of America (GSA)
- Human Genome Organization - (HUGO)
- Biometric Society - Eastern North American Region (ENAR)
- Institute of Food Technologists (IFT) – 2017 – present.
- Institute for Mathematical Statistics (IMS)
- National Academy of Medicine (NAM) [formerly Institute of Medicine (IOM)]
  - Elected to membership in 2012
- Mathematical Association of America (MAA)
- New York Academy of Science (NYAS)
• NIDDK Network of Minority Health Research Investigators (NMRI), 2014 - present.
• Obesity Action Coalition (OAC) – 2015 – Present.
• The Obesity Society (formerly NAASO)
  o Member of Publications Committee October 1996 - 1997.
  o Elected Member of Nominations Committee 1996 – 1997.
  o Served on a special Public Affairs Task Force to provide information regarding dietary supplements for weight loss to the U.S. General Accounting Office (GAO) – 2002.
  o Elected Member of Nominations Committee 2005-2006.
  o Elected and served as Vice President 2006-2007.
• Royal Society of Medicine – Admitted as Overseas Fellow, 2017.
• Society of Behavioral Medicine (SBM).
• Society for Epidemiologic Research (SER)
• Society for Nutrition Education and Behavior (SNEB), 2017 - present.
• Society for Public Health Education (SOPHE)
• Society for the Study of Ingestive Behavior (SSIB)
• TED – Ideas Worth Spreading (TED)
CONFERENCE & WORKSHOP ORGANIZATION

- Chair (with F. Xavier Pi-Sunyer) of a two-day meeting (≈200 participants) sponsored by the American Association for the Advancement of Science (AAAS), *Current Status of Scientific and Clinical Progress in Human Obesity* in February, 1993.
- Chaired organizing committee for the NAASO-sponsored and NIDDK-funded conference (≈120 participants) *Advancing the Genetics of Obesity: Strategies & Methods*, 1997.
- Elected Vice-Chair (with Michael Jensen, Chair) of 2001 FASEB summer conference on *Obesity & Energy Metabolism*.
- Vice Chair of the year 2000 annual meeting of the International Life Sciences Institute (ILSI) and Chair of the year 2001 annual ILSI meeting.
- Serve on the International Advisory Committee for the 2002 9th International Congress on Obesity in Brazil as the “International Expert” for the Track on *Genetics Of Obesity*.
- With Dr. Jose Fernandez in the lead, I organized a 1-day workshop on UAB’s campus regarding genetic admixture studies (see: http://mhrc.dopm.uab.edu/MHRC%20Genetic%20Admixture%20Workshop.pdf).
- Primary organizer and PI of NIH R13 grant for 2-day conference on *Design, Analysis, Interpretation of Randomized Clinical Trials In Obesity* held in Newark, NJ, Dec 4-5, 2006. For details, see: http://main.uab.edu/Shrp/Default.aspx?pid=97738.
- Primary organizer and host of NIH (NIA) sponsored 2-day workshop on *Statistical Methods for Longitudinal Data on Aging Workshop* held in Bethesda, Maryland, June 13-14, 2007.
- Principal UAB organizer of 3-day 2nd annual Southern Obesity Summit held in Birmingham, AL, Nov 9-11, 2008. For details, see: http://www.southernobesitiesummit.org/.
- Member of committee on statistics for World Congress on Genetics Applied to Livestock Production (WCGALP), 2012-2013.
MENTORSHIP ACTIVITIES (selected; see also leadership activities section)

- Mentored High School Student attending John F. Kennedy High School in Bellmore, New York on obesity research project through school's Advanced Science Research program: 2014.
- Mentored High School Student on Girls Scout Gold Award project involving obesity and nutrition, 2015.
- Mentor for American Heart Association Minority Mentoring Program, 2009 - present.
- Selected as a mentor for the Mentored Experiences in Research, Instruction, and Teaching (MERIT) Program, an NIH-funded Institutional Research and Academic Career Development Award (K12) from the Division of Minority Opportunities in Research (MORE) at NIGMS. It is facilitated through the partnership of UAB, Miles College (Fairfield, AL), and Stillman College (Tuscaloosa, AL). The primary goal of the MERIT Program is to provide postdoctoral scholars with outstanding research and teaching experiences while improving the recruitment of underrepresented minorities into the field of biomedical research, 2010-2017.
- Served on Doctoral Dissertation Committees for students at UAB, Columbia University Teachers' College, Hofstra University, Rutgers University.
- Master’s thesis advisor to Masters students at Columbia University and New York University.
- Pre-examiner for doctoral dissertation of Minna Oman from the University of Helsinki, 2001.
- Scientist participant in Science-By-Mail, a science correspondence program with fourth grade children, 1992-93
- Supervise/mentor high school interns from LaGuardia High School for Gifted Students, 1994-1996.
- Supervise/provide research experience to numerous masters and Ph.D. students from Fordham University.
- Internship supervisor of doctoral student in health psychology from Ferkauf College at Albert Einstein College of Medicine, 1995-1996.
- UAB Dept of Medicine Junior Faculty Mentoring Program led by Lisa M. Guay-Woodford, M.D., Director, Division of Genetic and Translational Medicine. As of Spring 2007, serving as one of three Scholar Advisory Committee (SAC) members for John Hartman MD, Asst Prof of Genetics, 2007 – 2010.
- Mentor for the NHLBI eMentoring Initiative, 2010 – present.
- Registered Mentor for the National Alliance for Doctoral Studies in the Mathematical Sciences, an alliance between a group of proven mentors in math sciences departments at several Ph.D. and master’s granting universities together with mentors at math science departments at colleges and universities which serve a substantial number of underrepresented undergraduate students, 2009 - Present.
- As community service, serve as advisor to one Girl Scout going for Girl Scout Gold Award with a nutrition and health project, 2014.
# A (non-exhaustive) Listing of Individuals Mentored Appears Below:

<table>
<thead>
<tr>
<th>Trainee</th>
<th>Topic of Study</th>
<th>Program</th>
<th>Dates of Training</th>
<th>Outcomes and/or Last known position</th>
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</thead>
<tbody>
<tr>
<td><strong>High School Students</strong></td>
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<tr>
<td>Angelique Fournier</td>
<td>Social &amp; Ethnic Influences on Obesity</td>
<td>NY Academy of Science Summer Internship program for Gifted High School Students</td>
<td>1992</td>
<td>One peer-reviewed paper.</td>
</tr>
<tr>
<td>Orlando Valazco</td>
<td>Estimating weight loss success.</td>
<td></td>
<td>1993</td>
<td>Completion of high school and entry into college.</td>
</tr>
<tr>
<td>Denise Sanchez</td>
<td>Obesity &amp; Mortality Rates</td>
<td></td>
<td>1995</td>
<td></td>
</tr>
<tr>
<td>Diana Townsend-Butterworth</td>
<td>Obesity &amp; Mortality Rates</td>
<td></td>
<td>1997</td>
<td>One peer-reviewed paper. Completed B.A. at Harvard University and MBA at University of Pennsylvania.</td>
</tr>
<tr>
<td>Adwoa Dadzie</td>
<td>Obesity &amp; Mortality Rates</td>
<td></td>
<td>1998</td>
<td>Completed Bachelor’s at Trinity College and Master’s at NYU. Currently employed by Nestle.</td>
</tr>
<tr>
<td>Jessica Singleton</td>
<td>Alternative Medicine &amp; Obesity</td>
<td></td>
<td>1999</td>
<td>Completed bachelor's in honors cognitive neuroscience program at Harvard. Currently research assistant at Columbia University.</td>
</tr>
<tr>
<td>Kristen Jozkowski²</td>
<td>Genetics of Food Intake</td>
<td></td>
<td>2000</td>
<td>Participant and finalist in several high school science fairs. Regional finalist in the U.S. Intel &quot;Science and Engineering&quot; Competition. Ended Full Professor at Indiana University Bloomington School of Public Health.</td>
</tr>
<tr>
<td><strong>Undergraduate Students</strong></td>
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<tr>
<td>Meredyth Kravitz</td>
<td>Obesity and self-esteem</td>
<td>Undergraduate Summer Volunteer</td>
<td>1997</td>
<td>One peer-reviewed paper; Obtained PsyD degree from Albert Einstein-Yeshiva University. Currently psychologist at the Manhattan Learning Center of the Jewish Board of Family and Children’s Services.</td>
</tr>
<tr>
<td>Judy Liu</td>
<td>General Research</td>
<td>Student Assistant</td>
<td>1996</td>
<td>Adjunct faculty at Florida Institute of Technology. Teaches Medical Ethics. Currently Director, Marketing at GlaxoSmithKline</td>
</tr>
<tr>
<td>Ankur Moondan</td>
<td>Statistical Methods for Power Analysis</td>
<td>Summer Intern from India</td>
<td>2008</td>
<td>One peer-reviewed paper published.</td>
</tr>
<tr>
<td>Giuliana Murati</td>
<td>Obesity and Genetics</td>
<td>Minority summer intern collaboration with University of Puerto Rico</td>
<td>2009</td>
<td>One peer-reviewed paper published. As of 2013, attending Ross University School of Veterinary Medicine.</td>
</tr>
<tr>
<td><strong>Post-Baccalaureate Students</strong></td>
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<tr>
<td>Elizabeth Manibay</td>
<td>Obesity</td>
<td>Ph.D. program in Psychology at CUNY Baruch College</td>
<td>1996</td>
<td>One paper published in peer-reviewed journal; Received NIH minority supplement grant. Currently Managing Director, Business Consulting at Charles Schwab Advisor Services.</td>
</tr>
<tr>
<td>Ming Infante</td>
<td>Statistical Genetics and obesity</td>
<td>Post-baccalaureate pre-med program, Columbia University</td>
<td>1998 – 1999</td>
<td>Three peer-reviewed papers. Currently getting Executive Master's at Cranfield University.</td>
</tr>
<tr>
<td>Trainee</td>
<td>Topic of Study</td>
<td>Program</td>
<td>Dates of Training</td>
<td>Outcomes and/or Last known position</td>
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<tr>
<td>Nathaniel Berman</td>
<td>Pediatric Obesity</td>
<td>Pre-Med program, Columbia University</td>
<td>1998 – 1999</td>
<td>One peer-reviewed paper in <em>Pediatrics</em>. Currently Assistant Professor in Medicine, Weill Cornell Medical College.</td>
</tr>
<tr>
<td>Master’s Students</td>
<td></td>
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<tr>
<td>Dennis Sepulveda</td>
<td>Obesity in Down Syndrome</td>
<td>Master’s Program at Columbia in Nutrition</td>
<td>1993</td>
<td>Two published papers. Received award for outstanding achievement by employee of Sanofi Pharmaceuticals.</td>
</tr>
<tr>
<td>Paula Iocova</td>
<td>Obesity</td>
<td>Extern from Psychology Master’s program at Fordham University</td>
<td>1995 – 1996</td>
<td>Successful application to Ph.D. program.</td>
</tr>
<tr>
<td>Tapan Mehta</td>
<td>Analysis of microarray data.</td>
<td>M.S. Student in Engineering at UAB. Now PhD mentoree at UAB.</td>
<td>2002 – 2013</td>
<td>Many papers published. Winner of multiple Young Investigator awards. Assistant professor (Tenure Earning), School of Health Professions, at UAB. Inducted into the DELTA OMEGA Honorary Society in Public Health, Upsilon Chapter</td>
</tr>
<tr>
<td>Doctoral Students</td>
<td></td>
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<tr>
<td>Hansen Bannerman-Thompson</td>
<td>Microarray analysis by support vector machines.</td>
<td>Graduate Intern (Ph.D. candidate at N. Dakota State U.)</td>
<td>Summer 2000</td>
<td>University of Cincinnati Post-Doc, Environmental Health</td>
</tr>
<tr>
<td>Eva Gropp</td>
<td>Obesity &amp; Genetics</td>
<td>Medical Student/Visiting Scholar from Germany</td>
<td>2000 – 2001</td>
<td>Several papers published. Currently post-doctoral fellow at Institute for Genetics, University of Cologne.</td>
</tr>
<tr>
<td>Susan Tennant</td>
<td>Obesity</td>
<td></td>
<td>1998</td>
<td>Completed PhD. Practicing Psychologist.</td>
</tr>
<tr>
<td>Chenxi Wang</td>
<td>Statistical methods for studying the relation between obesity and mortality.</td>
<td>Ph.D Student in Nutrition Sciences, UAB</td>
<td>2001 – 2004</td>
<td>Multiple published papers. Won Samuel L. Barker Award for Best Graduate Student at UAB in 2004, given to one and only one student in entire university per year. Currently Assistant professor of Nutrition, University of Louisville.</td>
</tr>
<tr>
<td>Scott W. Keith, Ph.D.</td>
<td>Statistical methods for studying obesity and mortality rate.</td>
<td>UAB Ph.D. Program in Biostatistics. Supported by NHLBI T32.</td>
<td>2004 – 2008</td>
<td>Many papers published and awards won. Assistant Professor, Biostatistics, Thomas Jefferson University.</td>
</tr>
<tr>
<td>Matt Giddings</td>
<td>Hormetic effects of caloric restriction on lifespan</td>
<td>Psychology at UAB</td>
<td>2007 – 2011</td>
<td>Received $10,000 grant as PI from the Alzheimer’s of Central Alabama to study nutritional influences on the progression of Alzheimer’s disease in a mouse model.</td>
</tr>
<tr>
<td>Trainee</td>
<td>Topic of Study</td>
<td>Program</td>
<td>Dates of Training</td>
<td>Outcomes and/or Last known position</td>
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<tr>
<td>Tiffany Cox, PhD, MPH</td>
<td>Design issues in obesity treatment trials</td>
<td>Epidemiology program at UAB</td>
<td>2009 – 2011</td>
<td>Assistant Professor, UAB Division of Preventive Medicine.</td>
</tr>
<tr>
<td>Molly Bernhard</td>
<td>Ambient temperature and food intake in humans.</td>
<td>Environmental Health Sciences PhD program at UAB</td>
<td>2013 - 2017</td>
<td>UAB Pre-doctoral Fellow NIH T32HL105349.</td>
</tr>
<tr>
<td>Henry Robertson, Ph.D.</td>
<td>Statistical methods for studying longevity.</td>
<td>Biostatistics PhD program at UAB</td>
<td>2008 - 2011</td>
<td>Scientist, Seton Health Care</td>
</tr>
<tr>
<td>Tapan Mehta, Ph.D.</td>
<td>Statistical methods for studying BMI and mortality.</td>
<td>Biostatistics PhD program at UAB</td>
<td>2011 - 2013</td>
<td>Assistant Professor, Dept of Physical Therapy, University of Alabama at Birmingham.</td>
</tr>
<tr>
<td>Daniella Chusyd</td>
<td>Energy expenditure and body composition in animal models. Co-mentored with Tim Nagy.</td>
<td>Nutrition PhD program at UAB</td>
<td>2013 - 2017</td>
<td>UAB Pre-doctoral Fellow NIH T32HL105349. Received PI grant from Eppley Foundation, a second co-PI grant from the Smithsonian, and a diversity supplement from the NIA.</td>
</tr>
<tr>
<td>Luis Mestre</td>
<td>Biostatistics and obesity.</td>
<td>Epidemiology and Biostatistics PHD program at IU</td>
<td>2017 - Present</td>
<td></td>
</tr>
<tr>
<td>Post-Doctoral Fellows</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Myles S. Faith, Ph.D.</td>
<td>Behavioral genetics of obesity.</td>
<td>Post-Doctoral Fellow</td>
<td>1995 – 1998</td>
<td>Professor and Associate Chair of the Department of Counseling, School, and Educational Psychology, University at Buffalo. Many papers and NIH grants as PI.</td>
</tr>
<tr>
<td>Angelo Pietrobelli, M.D.</td>
<td>Pediatric obesity &amp; Body Composition.</td>
<td>Post-Doctoral Fellow (from Italy)</td>
<td>1995 – 1998</td>
<td>Faculty Investigator, Verona University Medical School. Many papers published. Assoc editor of obesity journals.</td>
</tr>
<tr>
<td>Raffaella Zannoli, M.D.</td>
<td>Epidemiological studies in obesity.</td>
<td>Post-Doctoral Fellow (from Italy)</td>
<td>1998 – 1999</td>
<td>Multiple peer-reviewed papers. University of Siena, Assistant Professor.</td>
</tr>
<tr>
<td>Jose Fernandez, Ph.D.</td>
<td>Statistical genetics applied to obesity.</td>
<td>Post-Doctoral Fellow</td>
<td>1999 – 2001</td>
<td>Many papers published. Professor and Vice Chair, UAB Dept of Nutrition Sciences. NIH R01 funding as PI.</td>
</tr>
</tbody>
</table>

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3 Jointly mentored with Steven Heymsfield.
4 Jointly mentored with Steven Heymsfield.
5 Jointly mentored with Dympna Gallagher.
<table>
<thead>
<tr>
<th>Trainee</th>
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<tbody>
<tr>
<td>Shankuan Zhu, M.D., Ph.D.</td>
<td>Body composition &amp; mortality rates.</td>
<td>Post-Doctoral Fellow</td>
<td>2000 – 2001</td>
<td>Many papers published. Professor &amp; Executive Dean Zhejiang University, School of Public Health, PR China. NIH R01 funding as PI.</td>
</tr>
<tr>
<td>Siham Elamin, DVM</td>
<td>Genetic Epidemiology</td>
<td>Post-Doctoral Fellow</td>
<td>2003 – 2004</td>
<td>Veterinary Medical Officer, USDA/APHIS/VS.</td>
</tr>
<tr>
<td>Kyoungmi Kim, Ph.D.</td>
<td>Statistical genetics.</td>
<td>Post-Doctoral Fellow</td>
<td>2003 – 2005</td>
<td>Associate Professor, University of CA–Davis.</td>
</tr>
<tr>
<td>Solomon Musani, Ph.D.</td>
<td>Statistical genetics of Obesity</td>
<td>Post-Doc (T32)</td>
<td>2003 – 2005</td>
<td>Assistant Professor, University of Mississippi Medical Center.</td>
</tr>
<tr>
<td>Laura Kelly Vaughan, Ph.D.</td>
<td>Statistical Genetics of Obesity</td>
<td>Post-Doc (T32)</td>
<td>2005 – 2008</td>
<td>Assistant Professor of Biology College of Arts and Sciences King University.</td>
</tr>
<tr>
<td>Daniel Shriner6, Ph.D.</td>
<td>Statistical Genetics of Obesity</td>
<td>Post-Doc (T32)</td>
<td>2005 – 2008</td>
<td>NIH Staff Scientist, Center for Research on Genomics and Global Health</td>
</tr>
<tr>
<td>David Brock, Ph.D.</td>
<td>Obesity</td>
<td>Post-Doc (T32)</td>
<td>2006 – 2007</td>
<td>Associate Professor of Exercise Physiology, University of Vermont</td>
</tr>
<tr>
<td>Mai Elobeid, Ph.D.</td>
<td>Obesity</td>
<td>Post-Doc (T32)</td>
<td>2006 – 2008</td>
<td>Researcher, King Saud University</td>
</tr>
<tr>
<td>Marcus Guyton, Ph.D.</td>
<td>Obesity</td>
<td>Post-Doc (T32)</td>
<td>2006 – 2008</td>
<td>Unknown</td>
</tr>
<tr>
<td>Daniel Smith PhD</td>
<td>Caloric Restriction and Longevity</td>
<td>Post-Doc (T32)</td>
<td>2007 – 2010</td>
<td>Assistant Professor, Dept of Nutrition Sciences, UAB; PI of grant from the Ellison Foundation.</td>
</tr>
<tr>
<td>Stephen Erickson, Ph.D.</td>
<td>Statistical Genetics</td>
<td>Post-Doc (T32)</td>
<td>2006 – 2009</td>
<td>Assistant Professor, University of Arkansas Med. Sciences</td>
</tr>
<tr>
<td>Nicholas Pajewski, Ph.D.</td>
<td>Statistical Genetics</td>
<td>Post-Doc (T32)</td>
<td>2008 – 2010</td>
<td>Assistant Professor, Wake Forest University SOM</td>
</tr>
<tr>
<td>Gustavo de los Campos, PhD</td>
<td>Statistical Genetics</td>
<td>Post-Doc</td>
<td>2009-2011</td>
<td>Associate Professor of Epidemiology and Biostatistics, Michigan State University. Two R01s as PI. Many published papers.</td>
</tr>
<tr>
<td>Yann Klimentidis, Ph.D.</td>
<td>Genetics of Obesity Phenotypes</td>
<td>Post-Doc (T32)</td>
<td>2009 – 2011</td>
<td>Assistant Professor, University of Arizona. K-award and R01 as PI.</td>
</tr>
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6 Jointly mentored with Nengjun Yi.
<table>
<thead>
<tr>
<th>Trainee</th>
<th>Topic of Study</th>
<th>Program</th>
<th>Dates of Training</th>
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<tbody>
<tr>
<td>Kathryn Kaiser, Ph.D.</td>
<td>Design issues in obesity treatment trials</td>
<td>Post-Doc (T32)</td>
<td>2009 – 2011</td>
<td>Assistant Professor, UAB SOPH</td>
</tr>
<tr>
<td>Katherine Ingram, Ph.D.</td>
<td>Design issues in obesity treatment trials</td>
<td>Post-Doc (T32)</td>
<td>2009 – 2011</td>
<td>Assistant Professor, Department of Exercise Science and Sport Management, Kennesaw State University</td>
</tr>
<tr>
<td>Kirk Williams, Ph.D.</td>
<td>Genetic methods in obesity research</td>
<td>Post-Doc (T32)</td>
<td>2009 – 2011</td>
<td>Investigator, FDA</td>
</tr>
<tr>
<td>Ana Inés Vázquez, Ph.D.</td>
<td>Obesity, genes, and cancer</td>
<td>Post-Doctorial Fellow</td>
<td>2010 – 2012</td>
<td>Assistant Professor of Epidemiology and Biostatistics, Michigan State University</td>
</tr>
<tr>
<td>Henry Robertson, Ph.D.</td>
<td>High-dimensional Survival analysis</td>
<td>Statistician, Seton</td>
<td>2011 – 2012</td>
<td>Statistician, Seton Healthcare Family</td>
</tr>
<tr>
<td>Emily Dhurandhar, Ph.D.</td>
<td>Effects on Ad36 on glucose metabolism in cell culture models</td>
<td>Post-Doc (T32)</td>
<td>2011 – 2014</td>
<td>Assistant professor, Texas Tech University.</td>
</tr>
<tr>
<td>Andrew Brown, Ph.D.</td>
<td>Investigation and promotion of research reporting integrity in obesity research.</td>
<td>Post-Doc (T32)</td>
<td>2012 – 2014</td>
<td>Winner of American Society of Nutrition Young Investigator Award. NIH R25 as PI. Scientist II at UAB.</td>
</tr>
<tr>
<td>Jacqueline Harris, Ph.D.</td>
<td>Genetics and health disparities.</td>
<td>Post-Doc (T32)</td>
<td>2011 – 2013</td>
<td>Assistant Professor at Grambling State University</td>
</tr>
<tr>
<td>John Dawson, Ph.D.</td>
<td>Statistical genetics of obesity.</td>
<td>Post-Doc (T32)</td>
<td>2012 – 2014</td>
<td>Assistant Professor, Dept of Nutrition, Texas Tech University</td>
</tr>
<tr>
<td>Dwight Lewis, Ph.D.</td>
<td>Cardio-metabolic risk among overweight and obese African American males</td>
<td>Post-Doc (T32)</td>
<td>2012 – 2014</td>
<td>Assistant Research Analyst, University of Alabama (Tuscaloosa)</td>
</tr>
<tr>
<td>Aaron (Davis) Fobian, PhD</td>
<td>Assess the effects of increased sleep duration in overweight and obese adolescents</td>
<td>Post-Doc (HRSA)</td>
<td>2013 - 2014</td>
<td>Asst Prof, Psychiatry, UAB Received NIH K-award as PI. Selected as “Rising Star” by American Psychological Society, 2019.</td>
</tr>
<tr>
<td>Patrice Capers, PhD</td>
<td>Weight, body composition, and human traits</td>
<td>Post-Doc (MERIT)</td>
<td>2013 – 2016</td>
<td>Visiting Assistant Professor in the Biology Department, the Citadel.</td>
</tr>
<tr>
<td>Cynthia Kroeger, PhD</td>
<td>Research fidelity in nutrition research</td>
<td>Post-Doc (F32)</td>
<td>2015 – present</td>
<td>F32DK107157</td>
</tr>
<tr>
<td>Greg Pavela, PhD</td>
<td>Co-mentor with Dr. Julie Locher. Interpersonal influences on obesity</td>
<td>Post-Doc (T32)</td>
<td>2013 – 2015</td>
<td>Assistant Professor, Department of Health Behavior, University of Alabama at Birmingham</td>
</tr>
<tr>
<td>TaShauna Goldsby, PhD</td>
<td>Social defeat and energetics</td>
<td>Post-Doc (T32)</td>
<td>2014 – 2016</td>
<td>Appointed by Birmingham Mayor Woodfin as Director of Grants Division for the City of Birmingham.</td>
</tr>
<tr>
<td>Tonia Schwartz, PhD</td>
<td>Evolution of Molecular Networks and Complex Energetic Traits</td>
<td>Post-Doc (McDonnell Foundation)</td>
<td>2014 – 2015</td>
<td>Asst Prof, Auburn University</td>
</tr>
<tr>
<td>Keisuke Ejima, PhD</td>
<td>Mathematical models of obesity</td>
<td>Post-Doc</td>
<td>2014 - present</td>
<td>Fellowship: Japan Society for the Promotion of Science</td>
</tr>
<tr>
<td>Trainee</td>
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<td>Outcomes and/or Last known position</td>
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<tr>
<td>Alexis (Lekki) Wood, PhD</td>
<td>Genetics</td>
<td>Post-Doc</td>
<td>2012-2014</td>
<td>Assistant Professor, Baylor College of Medicine</td>
</tr>
<tr>
<td>Anarina Murillo, PhD</td>
<td>Mathematical models of obesity</td>
<td>Post-Doc</td>
<td>2016 - 2017</td>
<td>NIH T32, Received a 2018 mentor/mentoree grant of $5,000 from the Sloan Scholars Mentoring Network of the Social Sciences Research Council and the Alfred P. Sloan Foundation.</td>
</tr>
<tr>
<td>Colby Vorland, PhD</td>
<td>Meta-research in nutrition and obesity</td>
<td>Post-Doc</td>
<td>Jan. 2019-Present</td>
<td></td>
</tr>
<tr>
<td>Daniella Chusyd, PhD</td>
<td>Body composition &amp; large mammal endocrinology &amp; reproduction</td>
<td>Post Doc</td>
<td>2017 - Present</td>
<td></td>
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**Young Faculty**

<table>
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<tr>
<th>Trainee</th>
<th>Topic of Study</th>
<th>Program</th>
<th>Dates of Training</th>
<th>Outcomes and/or Last known position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bert Boyer, Ph.D.</td>
<td>Genetic epidemiologic methods in obesity.</td>
<td>Senior Post-Doctoral Fellow (NIH F32) on 1-year sabbatical from University of Alaska</td>
<td>1998 – 1999</td>
<td>Director, Center for Alaska Native Health Research; Professor of Molecular Biology, Department of Biology and Wildlife</td>
</tr>
<tr>
<td>Gary Gadbury, Ph.D.</td>
<td>Statistical analysis of microarray data.</td>
<td>Visiting Junior Professor</td>
<td>2000 – 2001</td>
<td>Chair of Department, Professor of Statistics, Kansas State University</td>
</tr>
<tr>
<td>Mary Weber, R.N., Ph.D. U. of Texas at Arlington</td>
<td>Antipsychotic-Induced Weight Gain</td>
<td>Remote Faculty Mentoree in the NIMH/NINR Mentorship Program for Building the Capacity of Psychiatric Mental Health Nurse Researchers. Pairs doctorally prepared psychiatric nurses who have high potential for a successful research career with mentors who are the top researchers in the nurses’ areas of research interest.</td>
<td>2002 – 2003</td>
<td>Endowed Associate Professor, University of Colorado College of Nursing</td>
</tr>
<tr>
<td>David Redden, Ph.D.</td>
<td>Statistical Methods for Partitioning of Linkage Data</td>
<td>Mentored K-Award recipient/Asst Prof.</td>
<td>2002 – 2011</td>
<td>Professor of Statistics, UAB</td>
</tr>
<tr>
<td>Jamy Ard, M.D.</td>
<td>Treatment and prevention of obesity</td>
<td>Mentored K-Award.</td>
<td>2003 – 2011</td>
<td>Assoc Prof, Internal Medicine &amp; Public Health Sciences &amp; Dir, Weight Management Center;</td>
</tr>
</tbody>
</table>

7 Jointly mentored with Rudy Leibel & Steven Heymsfield.
<table>
<thead>
<tr>
<th>Trainee</th>
<th>Topic of Study</th>
<th>Program</th>
<th>Dates of Training</th>
<th>Outcomes and/or Last known position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monica Baskin, Ph.D.</td>
<td>Treatment and prevention of childhood obesity</td>
<td>Serve as mentor on her pilot grants from CNRC and from an anonymous philanthropist.</td>
<td>2003 – 2010</td>
<td>Professor, UAB Dept. of Medicine, multiple R01s as PI</td>
</tr>
<tr>
<td>Nita Limdi, Ph.D.</td>
<td>Pharmacogenetics of Anticoagulation Therapy</td>
<td>Mentored K-Award recipient/Asst Prof./Masters student in Public Health</td>
<td>2003 – 2012</td>
<td>Associate Professor of Neurology and Epidemiology, UAB School of Medicine. R01 as PI</td>
</tr>
<tr>
<td>Nefertiti Durant, M.D.</td>
<td>Community and clinical aspects of obesity and its prevention</td>
<td>Assistant Professor of Pediatrics – Individual Mentor Arrangement</td>
<td>2006 – 2012</td>
<td>Assistant Professor, UAB Dept. of Pediatrics, Division of Pediatrics and Adolescent Medicine. Funding from RWJF as PI.</td>
</tr>
<tr>
<td>Olivia Thomas (now Affuso), Ph.D.</td>
<td>Exercise, epidemiology, and obesity.</td>
<td>Assistant Professor of Epidemiology – Individual Mentor Arrangement</td>
<td>2005 – 2010</td>
<td>Assoc Professor, UAB Dept. of Epidemiology, School of Public Health. R01 as PI.</td>
</tr>
<tr>
<td>Julie Yu</td>
<td>Obesity</td>
<td>Visiting Scholar (Nutritionist) from Taiwan</td>
<td>1997</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
LICENSURES and CERTIFICATIONS

* New York State Licensed Clinical Psychologist; License # 011212-1. Valid through 1/31/2022.

* Certified instructor in physical intervention and restraint (SCIP) by the New York State Office of Mental Retardation and Developmental Disabilities (certification now expired).
