



**LIFE SCIENCES
GRADUATE RECRUITMENT
SYMPOSIUM**

FEBRUARY 5TH-7TH 2025

TABLE OF CONTENTS

Welcome	2
Schedule	3
Our Team	4
Our Sponsors	5
Keynote Speaker	7
Oral Presenters	8
Poster Presenters	10
Things to Think About	16
The Grit Scale	18
The Five Personality Traits	22
Mentorship Style Self-Assessment	27
Impressions of Texas A&M	30
Poster & Talk Notes	32

HOWDY!

WELCOME

At Texas A&M University, six graduate programs in the Life Sciences have come together to form a network to facilitate cross-disciplinary collaborations, join their outreach and recruitment efforts, build a graduate student community, and bring diversity to the institution.

The Texas A&M Life Sciences Network (LSN) represents the premier Ph.D. programs in the life sciences that collaborate on recruiting, orientation, programming, and graduate student support. These programs provide exceptional opportunities to pursue a Ph.D. degree across a wide breadth of life science disciplines with some of the most stellar faculty and research programs on campus.

PROSPECTIVE GRADUATE STUDENTS

Why Choose Texas A&M? At Texas A&M University, graduate and professional students learn from faculty members who are respected experts at the top of their fields. They work together in state-of-the-art facilities to solve pressing global challenges. Through practical learning experiences, students gain the skills and knowledge needed to excel professionally in their chosen field.

CONTACT:



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SCHEDULE OF EVENTS

8:00 - 8:30 AM

Welcome Breakfast

Candidates only

Texas A&M Hotel and Conference Center Ballroom

8:30 - 9:00 AM

Remarks by Dr. Fuhui Tong

Associate Provost & Dean of the Graduate & Professional School.

Candidates only

Texas A&M Hotel and Conference Center Ballroom

9:00 - 10:00 AM

Elevator Pitches by Research Facility Cores

Candidates only

Texas A&M Hotel and Conference Center Ballroom

10:00 - 12:00 PM

Break or Program-Specific Activity

Lunch

Texas A&M Hotel and Conference Center Corps Room

Optional: IMSD T32 Informational Session, Texas A&M Hotel and Conference Center Reveille Room

12:00 - 1:00 PM

Graduate Student Poster Presentations

4141 Locomotive/Marine One Pavilion

2:00 - 4:30 PM

Graduate Student Oral Presentations

4141 Locomotive/Marine One Pavilion

4:30 - 5:45 PM

Keynote Speech by Mr. James M. Olson

Professor of the Practice Emeritus, The Bush School of Government & Public Service

4141 Locomotive/Marine One Pavilion

6:00 - 6:45 PM

Banquet & Mingle featuring the Clark Holleman Mowrer Jazz Trio

RSVP only

4141 Locomotive/Marine One Pavilion

7:00 - 8:30 PM

OUR TEAM



Ximena Paez

Chair of the Life Sciences Graduate Recruitment Symposium
Associate Department Head for Administration,
Department of Nutrition



Tyler Fadal

Academics Program Manager, Department of Nutrition



Noor Kaur

Program Coordinator & Graduate Academic Advisor, Interdisciplinary Faculty of Toxicology Graduate Program



Serina DeSalvio

Program Coordinator, Department of Nutrition



Irving Valdez

Program Coordinator, Office of Graduate Studies, College of Medicine



Isabel Caballero

Program Manager, Interdisciplinary Graduate Program in Genetics & Genomics



Tera McAdoo

Academic Program Assistant, Department of Biochemistry & Biophysics



Tamara Ospina-Vega

Program Coordinator, Interdisciplinary Graduate Program in Genetics & Genomics



Sylvia Bernal Jones

Graduate Program Coordinator, Texas A&M Institute for Neuroscience

OUR SPONSORS



TEXAS A&M UNIVERSITY
Graduate and
Professional School



**AGRICULTURE
& LIFE SCIENCES**
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Department of Epidemiology & Biostatistics



TEXAS A&M UNIVERSITY

Veterinary Medicine
& Biomedical Sciences

OUR BIGGEST SUPPORTER

Dr. Fuhui Tong

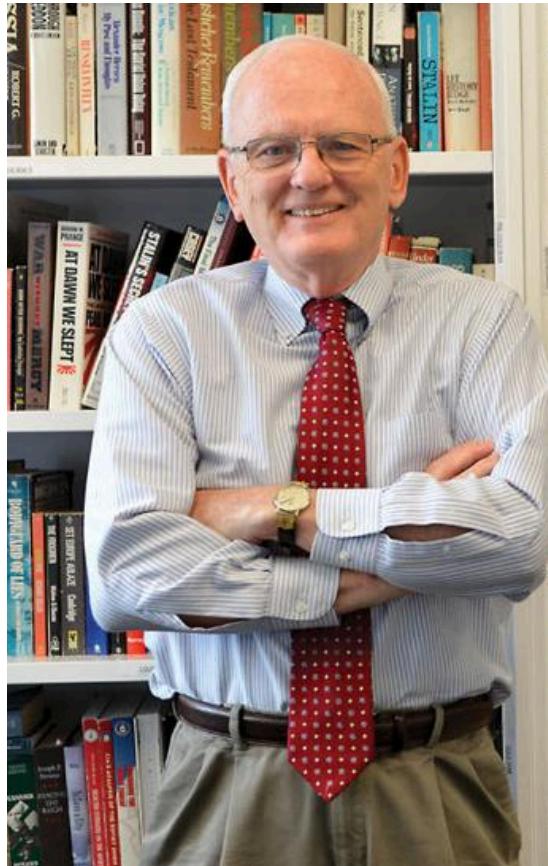
**Associate Provost and Dean
of the Graduate and
Professional School**



Dr. Fuhui Tong is the Associate Provost and Dean of the Graduate and Professional School. Her responsibilities include providing strategic, scholarly and financial leadership of the school, bolstering the university's identity as a research institution in a manner analogous to our peers, and supporting the enhancement of all graduate and professional programs to build and sustain excellence. Dr. Tong joined Texas A&M in 2007 and is a Professor in the Department of Educational Psychology.

Before serving as Interim Associate Provost and Dean from 2022-24, Dr. Tong served as Department Head and Doug Palmer Endowed Chair of Educational Psychology. Working collaboratively with her team, Dr. Tong has led the department to elevated academic excellence and recruited talented faculty and staff, along with \$22 million in new funding to support research and graduate education. During her tenure, graduate applications and enrollment of underrepresented minority graduate/professional students saw considerable gains. Dr. Tong has also co-directed an \$80 million system-approved research center where a diverse group of graduate students acquired research and publication experiences. Students advised by Dr. Tong have become local and global leaders in PK-16 settings.

KEYNOTE SPEAKER



James M. Olson

**Professor of the Practice Emeritus at
the Bush School of Government and
Public Service
Texas A&M University**



James Olson was born in Iowa and graduated from the University of Iowa. He served in the U.S. Navy aboard guided missile destroyers and frigates and attained the rank of lieutenant commander in the U.S. Navy Reserves. Mr. Olson earned his law degree from the University of Iowa and became a member of the Iowa Bar. His goal was to be a small-town lawyer in Iowa, but that changed when the Central Intelligence Agency offered him a position in the clandestine service. Mr. Olson met his wife Meredith at the CIA and together they served under cover for 31 years conducting espionage and covert action operations overseas. They served in Paris, Moscow, Vienna, Mexico City, and Washington, D.C. At CIA headquarters, Mr. Olson was Chief of Counterintelligence. After retiring from the CIA, he taught intelligence at the Bush School of Government and Public Service of Texas A&M University. Mr. Olson is the author of *Fair Play: The Moral Dilemmas of Spying* and *To Catch a Spy: The Art of Counterintelligence*. Meredith and Jim have three children and eleven grandchildren.

ORAL PRESENTERS

Toxicology

Nikki Barlow

Title: Improving toxicant screening in biological samples with ion mobility spectrometry-mass spectrometry

Olivia Lampe

Title: The aging effects of ozone and ultraviolet light on the respiratory toxicity of microplastics

Nadia Samiya

Title: Prenatal alcohol exposure: impact on middle aged wildtype and transgenic F344-AD rats

Nutrition

Zahra Esmaeilinezhad

Title: Pre-appraised nutrition evidence synopses: a tool to support up to date, evidence-based practice

Lauren Gladwell

Title: Epigenetic research in obesity: from bench science to bioinformatics

Joelle Sfeir

Title: Comparison of manual coding vs automated coding of 24-hour dietary recall in adolescents

Biochemistry & Biophysics

Morgan Powers

Title: Site-Resolved Thermodynamic Analysis of ATP Binding to a GroEL ring

Jooyoung Shin

Title: Application of cryo-em in the discovery of drugs targeting the mycobacterium tuberculosis ribosome

Jadon Sitton

Title: Lipid determine the toxicity of human islet amyloid polypeptide aggregates *in vivo*

ORAL PRESENTERS

Jordan Cook

Title: Circadian regulation of dopamine release and reward-seeking behavior by the local molecular clock in dopamine neurons of the ventral tegmental area

Cassandra Kaufhold

Title: Investigating the impact of prior-gut dysfunction on nigrostriatal neurodegeneration and Microglial activity in a parkinsonian rat model of 6-hydroxydopamine

Gauri Pandey

Title: Developing neuroprotective treatments towards Parkinson's Disease

Neuroscience

Esmé Cope

Title: Engineering a CRISPR Interference System for targeted gene repression in *Aedes aegypti*

Stephanie McMahon

Title: Utilizing machine learning to turn patient data into personalized treatment

Trevor Millar

Title: Uncovering the role of structural variants in complex trait variation using a pangenome graph

Genetics & Genomics

Rosaline Kumar

Title: Investigating the effects of prenatal alcohol exposure on Xist

Tatlock Lauten

Title: Targeting beta adrenergic signaling for autoimmune pathologies

Brittany Shapiro

Title: *Borrelia burgdorferi* BosR binds small non-coding RNAs (sRNAs): Implications for borrelial post-transcriptional gene regulation and pathogenesis

Medical Sciences

POSTER PRESENTERS

Biochemistry & Biophysics

- 1 Abishek Bastiray: Biophysical basis of interaction of ORF9b of SARS-CoV-2 with Human Tom70
- 2 Amelia Brave: Exploiting *Bacillus subtilis* mobilization by *Streptomyces* spp. as a path to natural product discovery
- 3 Zachary Hoover: Structural Diversity of RNA Bacteriophages
- 4 Alexandria Kemp: Protein in a Bubble – Progress Towards the Reverse Micelle Encapsulation of 3CLpro
- 5 Mason Kretiv: A non-invasive and broadly specific advancement in the *Clostridioides difficile* treatment paradigm
- 6 Evan Kurtz: Small signaling peptides regulate development in *Sorghum bicolor*
- 7 Brianna Martin: Understanding the endosomal n-bar and ehd proteins in regulated membrane fission
- 8 Gladys Owusu-Addo: Influence of intramolecular epistasis on catalytic promiscuity and enzyme specificity among protein homologs
- 9 Noah Sherer: The Mechanistic Basis for Immune Evasion by ORF9B of SARS-CoV-2
- 10 Jadon Sitton: Lipids determine the toxicity of human islet amyloid polypeptide aggregates *in vivo*
- 11 Diyun Sun: Lipids Determine the Toxicity of Human Islet Amyloid Polypeptide Aggregates *in vivo*
- 12 Dyaln Suriadinata: Phosphatidylethanolamine exposure is

recognized by transthyretin-like TTR-53 for phagocytosis.

- 13 Chaohua Wu: Phage-antibiotic synergy: Permeabilization of chemicals kills the bacteria during phage infection

Genetics & Genomics

- 14 Emmarie Alexander: Using the Y-Chromosome to Resolve Contentious Mammalian Phylogenetic Relationships
- 15 Marianny Alvarado Gonzalez: A Comprehensive Multi-omics Analysis to Assess the Strain-Dependent Effects of Dietary Vitamin A and Fat Intake on the Liver in Female Mice
- 16 Andres Barboza Pereira: Epistatic Capacitance
- 17 Hannah Carter: Investigating the Role of SIM2 and SIRT3 in Mitochondrial Dynamics and Homeostasis in ER+ BC
- 18 Kaitlyn Carter: Transcriptomics and Transgenesis in the stable fly
- 19 Tyler Chan: Transcriptomics and Transgenesis in the stable fly
- 20 Isabella Childers: Dynamics of recombination rate evolution in placental mammals
- 21 Aaron DeSalvio: Multi-Modal Maize Yield Estimation Across 19 Diverse Environments Using Phenomic, Genomic, and Enviromic Data
- 22 Samantha Higgins: Genetic Diversity and Developmental Bioenergetics: a New

Medical Sciences

23 Mouse Model to Investigate Paternal Epigenetically Induced FASDs

24 Pei-Jung Hsin: Genetic Basis of Feather Pigmentation Patterns and Shape Using a Mendelian Intercross of Red Junglefowl and Silver Sebright

24 Ramsey Jenschke: The role of Sim2s in Electron Transport Chain Super Complexes Across Normal Mammary Gland Development

25 Harpreet Kaur: Regulation of Mitochondrial Dysfunction in Down Syndrome

26 Anthony Matarazzo: Heterogeneous Brain Region-Specific Responses to Astrocytic Mitochondrial DNA Damage in Mice

27 Autumn McManis: Bioengineered 3D Glioblastoma Multiforme Model

28 Mayra Mendoza Cerna: High Quality Alpaca Genome VicPac4 and Oligo-FISH Reveal a Satellite Sequence Specific to South American Camelids

29 Charles Mitchell: Potential Neuroprotective Transition Metal Dichalcogenide Nanoflower Therapeutic for Parkinson's Disease

30 Alexandra Naron: Dietary Methyl Donor Intervention Reverses Memory of prior American Diet Exposure in B6 males

31 Joseph Romanowski: Transgene Removal Using DNA Repair

32 Darby Ballard: Eukaryotic Elongation Factor-2 Kinase (eEF2K) as a Regulator of T Cell Function in Inflammatory Bowel Disease

33 Samantha Beevers: Targeting Soluble Urokinase Plasminogen Activation Receptor Signaling in Cholangiocarcinoma

34 Kennedy Coleman: Implications of the BosR Redox State in *Borrelia burgdorferi*

35 Ashley Douthitt: Tryptophan-derived metabolites promote locomotion and mitigate gut inflammation after spinal cord injury in mice

36 David Gafford-Gaby: *borrelia burgdorferi* BB0473, a putative multidrug and toxin efflux protein, is important for mammalian infectivity

37 Savana Green: Investigating the interactions of protein kinase C with clinically relevant modulators in diacylglycerol-enriched membranes

38 Charlotte Heide: Investigating *Salmonella enterica*'s Retron-Sen2: Mechanisms of the toxin-antitoxin system

39 Shedreanna Johnson: Lymphatic Structure and Function are Associated with Duchenne Muscular Dystrophy Pathogenesis in a Canine Model

40 Uffaf Khan: Pleozyme: A Novel, Pleiotropic Nanozyme for Targeting Metabolic Deficit in Friedreich's Ataxia

41 Tamara Natour: The Role of Beta Adrenergic Signaling in Splenic T-

lymphocyte Inflammation Following Psychological Stress

42 Cristobal Rodriguez: Development of a novel non-secreted form of S100B and its relevance to Parkinson's Disease

43 Siddesh Sabnis: D-serine disrupts Cbln1 and GluD1 interaction and affects Cbln1-dependent nocifensive responses in the central amygdala

44 Hannah Smith: *Borrelia burgdorferi* BosR binds small non-coding RNAs (sRNAs): Implications for borrelial post-transcriptional gene regulation and pathogenesis

45 Payton Smith: Host-specific complement inhibition in relapsing fever spirochete fibronectin binding proteins

46 Brittany Shapiro: *Borrelia burgdorferi* BosR binds small non-coding RNAs (sRNAs): Implications for borrelial post-transcriptional gene regulation and pathogenesis

47 Javier Villela Castrejon: Systems Biology Approach to Cancer Metabolism: Balancing Catabolic and Anabolic Activities

48 Samuel Vrana: Engineering synthetic binding proteins to target a putative syphilis antigen for use as diagnostic tools

Neuroscience

49 Matthew Alwood: Proactive Avoidance Learning Requires Suppression of Dorsal Hippocampus-Mediated Defensive Reactions

50 Sara Arredondo: Dopamine Receptors Modulate Motor Neuron Structure and Function in *Drosophila*

51 Roshni Babu: Extracellular vesicles from Human IPC-Derived Neural STEM Cells can Protect Human Neurons Against A-Beta-Induced Oxidative Stress, Mitochondrial Dysfunction and Tau Phosphorylation

52 Sarah Berny: Late-Onset Alzheimer's Disease Risk Factor BIN1 Maintains Oligodendrocyte Homeostasis and Axon Integrity in Aging Mice

53 Jessica Bryan: Targeting Noradrenergic Signaling to Mitigate Bone Loss After Spinal Cord Injury

54 Grace Hall: The Role of Astrocytic Mitochondria in Maintaining the Blood Brain Barrier during Parkinson's Disease

55 Yuhan Huang: Neuromuscular Basis of Protopodia Movement during *Drosophila* Larval Crawling

56 Parinita Mitcelle Mandhyan: Neural Circuitry Underlying Proprioception in *Drosophila* Larvae

57 Jordan Mar: machine scoring workflow for analysis of rodent behavioral experiments

58 Glenae Nora: Rapid Morphological Changes in the Gut Epithelium of Male Rets After a Moderate Spinal Cord Injury and IGF-1 Beneficial Effects on Repair

<p>59 Lizzy Olsen: Structural Neuroplasticity of Motor Circuits Following Loss of Motor Neuron Subsets</p> <p>60 Kofi Owusu-Ansah: Prenatal Paternal Alcohol Consumption Causes Postnatal Changes in the Neural Retinas of Offspring</p> <p>61 Mia Pacheco: post-injury depletion of neutrophils worsens recovery following spinal cord injury in a sex dependent manner</p> <p>62 William Purvines: Prenatal alcohol exposure reduces cholinergic interneuron activity and impairs cognitive flexibility in adult offspring</p> <p>63 Ankura Sitaula: Astrocytes use neurotransmitter-gated chloride channels to modulate motor circuit activity in <i>Drosophila</i></p>	<p>67 Margarita Chouliara: Promoting Healthy Eating Through Augmented Reality and Artificial Intelligence-Driven Menus in Hispanic Restaurants</p> <p>68 Nirjhar Ruth Ghosh: Promoting Healthy Eating Through Augmented Reality and Artificial Intelligence- Driven Menus in Hispanic Restaurants</p> <p>69 Chinanu Gubor: A Community-Based Participatory Research Study on Acculturation and Quality of Life Among Immigrant Adults in Texas</p> <p>70 Hye Won Han: Nutrient-sensing GHSR regulates intermittent fasting-induced immune reprogramming in obesity</p> <p>71 Wen Jiang: Inhibition of HO1 by Small Molecules Improves Metabolic Disease</p> <p>72 Zeyu Liu: Ghs-r Deficiency in Macrophage Reprograms Innate Immune cell population AND Alleviates the Inflammation in Aged Mouse Heart</p> <p>73 Erlinda Pena: Acanthosis Nigricans and PCOS Symptomology in Hispanic Adolescents living in Texas</p> <p>74 Catherine Qin: PCSK6 expression potential impact on colitis severity</p>
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Nutrition

<p>64 Emanuele Baldassarri: Genetic Susceptibility of Elevated Serum Alanine Transaminase and Liver Dysfunction in A/J Mice Fed a Japanese Diet</p>	
<p>65 Kaitlyn Blankley: The Effects of Organophosphate Flame Retardants on Metabolic Health in Mice</p>	
<p>66 Amber Chang: Glycemic Variability in Adolescents with Polycystic Ovary Syndrome (PCOS)</p>	

Toxicology

<p>75 Kaylyn Dinh: development of Dispersive Solid Phase Extraction (DSPE) for Targeted PFAS Analysis in Daily Milk</p>
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76 Evan Farkas: Bis-indole Derived Nuclear Receptor 4a1 (NR4a1) and NR4a2 Dual Inverse Agonists Synergistically enhance Temozolomide Cytotoxicity in Glioblastoma Cells

77 Aidan Holman: The Effects of High Phospholipid Diets on Behavior, Mortality, and α -Synuclein Aggregation in *Caenorhabditis elegans* model for Parkinson's Disease

78 Isaac Juarez Hinojosa: Tracking Dose-Dependent Heavy Metal Toxicities in Rice using Raman Spectroscopy

79 Zachary Kobs: Temporal Changes and Disparities in Arsenic Contamination in Texas Public Water Systems, 2007-2023

80 Haley Moyer: Comparative Analysis of Caco-2 Cells and Human Enteroids (Jejunal or Duodenal) in Gel- and Membrane-Based Barrier Models of Intestinal Permeability

81 Johnson Odadele: Adsorption and detoxification of PFAS by edible nutraceuticals-amended clays

82 Hannah Roe: What Does Success Look Like? The Curious Cases of Accepted Read-Across in Compliance Check Decisions by the European Chemicals Agency

83 Alexandra Svetlik: Examining Urinary Extracellular Vesicles in South Texas Population Exposed to Inorganic Arsenic through Drinking Water

84 Devin Teri: New Approach Methods to Study "Difficult to Test Substances" in Cell-Based Models: Comparative Analysis of the Chemical Composition of Neat and Extracted Samples

85 Wai Ning Tiffany Tsui: Bis-Indole- Derived Dual Nuclear Receptor 4A1 (NR4A1) and NR4A2 Ligands as Inhibitors of Endometriosis

*Here at A&M, the science
competes at the highest level.*

- Dr. David Threadgill

University Distinguished Professor, Head of the Department of Nutrition, Texas A&M University





THINGS TO THINK ABOUT

Interviewing for graduate school is an intense process! This is space to reflect on your past experiences and your future goals, and how well those two align.

What are some skills you already have that will help you in graduate school?

What are some skills you hope to learn in graduate school?

What are your research interests?

Why did you apply to Texas A&M?

Why did you apply to your program?

What are your passions, and what are your top priorities (personally and professionally)?

How do your goals align with the goals of the people you have met here at Texas A&M?



Looking Forward

In the next several pages, we've provided some resources for you to use to learn more about yourself, reflect on what you've learned, and think about how your skills and personality will play a role in your graduate school career.

Hopefully, as you move through this book, you have the opportunity to think about what you hope to get out of graduate school, what kind of goals you are setting for yourself, and what you need to do in order to achieve those goals.

HOW GRITTY ARE YOU?

Welcome to the Grit Scale, developed by psychologist Dr. Angela Duckworth. Here are a number of statements that may or may not apply to you. There are no right or wrong answers, so just answer honestly, considering how you compare to most people. And the end, you'll calculate a score to see how gritty you are!

1. I have overcome setbacks to conquer an important challenge.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

2. New ideas and projects sometimes distract me from previous ones.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

3. My interests change from year to year.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

4. Setbacks don't discourage me.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

5. I have been obsessed with a certain idea for a short time, but later lost interest.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

6. I am a hard worker.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

7. I often set a goal but later choose to pursue a different one.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

8. I have difficulty maintaining my focus on projects that take more than a few months to complete.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

9. I finish whatever I begin.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

10. I have achieved a goal that took years of work.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

11. I become interested in new pursuits every few months.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

12. I am diligent.

- Very much like me
- Mostly like me
- Somewhat like me
- Not much like me
- Not like me at all

SCORING

For questions 1, 4, 6, 9, 10, and 12 assign the following points:

5 = Very much like me
4 = Mostly like me
3 = Somewhat like me
2 = Not much like me
1 = Not like me at all

For questions 2, 3, 5, 7, 8, and 11 assign the following points:

1 = Very much like me
2 = Mostly like me
3 = Somewhat like me
4 = Not much like me
5 = Not like me at all

Add up all the points and divide by 12. The maximum score on this scale is 5 (super gritty) and the lowest scale on this scale is 1 (not at all gritty).

Space to add up your points and calculate your score:

ABOUT THE GRIT SCALE



The Grit Scale was developed by [psychologist Angela Duckworth](#) to measure perseverance and passion when working towards long-term goals (Duckworth et al, 2007). It is a brief, self-report measure of individual levels of grit, which is perseverance and passion for long-term goals. This measure focuses on the extent to which respondents work strenuously toward challenges, maintain effort and interest over years despite failure, adversity, and plateaus in progress. It consists of two factors: Consistency of Interests and Perseverance of Effort.

GRIT is an acronym for **Growth**, **Resilience**, **Instinct**, and **Tenacity**, and the meaning of the acronym reflects the definition of grit – referring to one's ability to show bravery and resolve when confronted with setbacks and obstacles. The average GRIT score for Americans is a 3.8.

GRIT has been found to be a leading factor in success -- especially in people looking to be great at challenging things, like prospective graduate students!

Chances are if you've gotten this far, you're probably at least a little gritty -- but if you're not as gritty as you might have thought or hoped, there are lots of ways to increase your GRIT score, like:

- Being receptive and open to feedback
- Cultivating a mindset that focuses on growth
- Establishing, structuring and focusing on very specific goals
- Putting your efforts into projects you are passionate about

And even if your GRIT score was super high -- all of these suggestions will help you be a better graduate student overall!

REFLECTION

**Were you surprised
by your GRIT score?
Why or why not?**

How do you think you could improve your GRIT score?

Which aspect of GRIT do you think you have more of: passion, or perseverance?

FIVE BIG PERSONALITY

TRAITS SCALE:

Using the scale below as a guide, write a number from beside each statement to indicate how much you agree with it.

1 2

Not True

3 4

Somewhat True

5 6

7

Very True

- 1. I'm not a worrier.
- 2. I like to have a lot of people around me.
- 3. I don't like to waste time daydreaming.
- 4. I try to be courteous to everyone I meet.
- 5. I keep my belongings clean and neat.
- 6. I often feel inferior to others.
- 7. I laugh easily.
- 8. Once I find the right way to do something, I stick to it.
- 9. I often get into arguments with my family and coworkers.
- 10. I'm pretty good about pacing myself so as to get things done on time.
- 11. When I'm under a lot of pressure, sometimes I feel like I'm going to pieces.
- 12. I don't consider myself particularly "lighthearted".
- 13. I am intrigued by the patterns I find in art and nature.
- 14. Some people think I'm selfish.
- 15. I am not a very methodical person.
- 16. I rarely feel lonely or blue.
- 17. I really enjoy talking to people.

- 18. I believe letting students hear controversial speakers can only confuse and mislead them.
- 19. I would rather cooperate with others than compete with them.
- 20. I try to perform all tasks assigned to me very conscientiously.
- 21. I often feel tense and jittery.
- 22. I like to be where the action is.
- 23. Poetry has little or no effect on me.
- 24. I tend to be cynical and skeptical of other's intentions.
- 25. I have a clear set of goals and work toward them in an orderly fashion.
- 26. Sometimes I feel completely worthless.
- 27. I usually prefer to do things alone.
- 28. I often try new foods.
- 29. I believe that most people will take advantage of you if you let them.
- 30. I waste a lot of time before settling down to work.
- 31. I rarely feel fearful or anxious.
- 32. I often feel as if I am bursting with energy.

___ 33. I seldom notice the moods or feelings that difference environments produce in me.

___ 34. Most people I know like me.

___ 35. I work hard to accomplish my goals.

___ 36. I often get angry at the way people treat me.

___ 37. I am a cheerful, high-spirited person.

___ 38. I look for religious or spiritual leaders for moral guidance.

___ 39. Some people think of me as cold and calculating.

___ 40. When I make a commitment, I can always be counted on to follow through.

___ 41. Too often, when things go wrong, I get discouraged and feel like giving up.

___ 42. I am not a cheerful optimist.

___ 43. Sometimes when I am ready poetry or looking at art, I feel a chill or wave of excitement.

___ 44. I'm hard-headed and tough-minded in my attitudes.

___ 45. Sometimes I'm not as dependable or reliable as I should be.

___ 46. I am seldom sad or depressed.

___ 47. My life is fast-paced.

___ 48. I have little interest in speculating on the nature of the universe or the human condition.

___ 49. I generally try to be thoughtful and considerate.

___ 50. I am a productive person who always gets the job done.

___ 51. I often feel helpless and want someone else to solve my problems.

___ 52. I am a very active person.

___ 53. I have a lot of intellectual curiosity.

___ 54. If I don't like people, I let them know it.

___ 55. I never seem to be able to get organized.

___ 56. At times I have been so ashamed I just wanted to hide.

___ 57. I would rather go my own way than be the leader of others.

___ 58. I often enjoy playing with theories or abstract ideas.

___ 59. If necessary, I am willing to manipulate people.

___ 60. I strive for excellence in everything I do.

Scoring Key:

$$\text{Openness} = (13+28+43+53+58) - (3+8+18+23+33+38+48)$$

$$\text{Conscientiousness} = (5+10+20+25+35+40+50+60) - (15+30+45+55)$$

$$\text{Extroversion} = (3+7+17+22+32+37+47+52) - (12+27+42+55)$$

$$\text{Agreeableness} = (4+19+34+49) - (9+14+24+29+39+44+54+59)$$

$$\text{Neuroticism} = (6+11+21+26+36+41+51+56) - (1+16+31+46)$$

ABOUT THE FIVE BIG PERSONALITY TRAITS SCALE

The goal of the test you just took, the NEO Five-Factor Inventory (NEO-FFI), a shorter version of the NEO Personality Inventory-revised, is to measure five dimensions of your personality that can help you identify suitable career paths and work environments that might work best for you. Each of these five factors are:

Openness

- Fantasy
- Aesthetics
- Feelings
- Ideas
- Values

Neuroticism

- Anxiety
- Anger
- Hostility
- Depression
- Self-Consciousness
- Impulsiveness
- Vulnerability

Conscientiousness

- Competence
- Order
- Dutifulness
- Deliberate
- Self-disciplined
- Achievement-oriented

Extraversion

- Warmth
- Assertiveness
- Excitement-seeking
- Positivity
- Sociability
- Energetic

Agreeableness

- Trust
- Straightforwardness
- Altruism
- Compliance
- Modesty
- Compassion
- Cooperation

Based on your score in each category, you likely approach problem solving, learning, and critical thinking differently...

Openness

Also called openness to experience, this trait emphasizes imagination and insight. People high in this trait tend to have a broad range of interests. They are eager to learn new things and enjoy new experiences. They are also very adventurous and creative. Conversely, those lower in this trait are more traditional, and may struggle with abstract thinking.

Neuroticism

This trait is characterized by sadness, moodiness, an emotional instability. People high in neuroticism tend to experience mood swings, anxiety, irritability, and sadness. They also tend to struggle with bouncing back after stressful events. Those low in this personality trait tend to be more stable and emotionally resilient.

Extraversion

Extraversion (or extroversion) is characterized by excitability, sociability, talkativeness, and high amounts of emotional expressiveness. These people are usually outgoing and being around others helps them feel energized and excited. People low in this trait tend to be more reserved, and find social events more draining.

Agreeableness

This personality trait includes attributes like trust, kindness, affection, and other prosocial behaviors (those that help other people). People high in agreeableness are more cooperative, while those low in this personality trait tend to be more competitive and sometimes manipulative.

Conscientiousness

Conscientiousness is defined by high levels of thoughtfulness, good impulse control, and goal-directed behaviors. Highly conscientious people tend to be organized and detail-oriented. They plan ahead. A lower scorer in this trait may be less structured and organized, and may be more inclined to procrastination and missing deadlines.

... and your natural inclinations to different personality traits may change what type of environment or mentor will best serve you in graduate school.

REFLECTION

Which personality trait did I score highest in? And lowest? Why do I think I scored the ways I did in each?

How will my personality traits serve me in graduate school?

What personality trait would I like to score higher in? How would I get there?

MENTORSHIP STYLE SELF-ASSESSMENT

Read the statements below to see which you believe fits your natural mentoring style. Circle the corresponding number. Try to really focus on what comes to you naturally and which statements you agree with most. **Circle no more than six numbers.**

As a natural mentor, I tend to:

1 Confront issues head on, especially if I see them holding someone back

6 Help mentees learn from their mistakes and grow from them

11 Try to increase my mentees understanding of the field

2 Provide creative ideas to help foster creativity in my mentees

7 Use high-energy communication styles to try to motivate my mentees

12 Strongly discourage my mentees from giving up

3 Push my mentees to improve their performance and set big goals for themselves

8 Offer advice about who my mentees should talk to in order to reach their goals

13 Work collaboratively on big-picture problem solving

4 Offer a lot of positive encouragement and support

9 Share about challenges I have faced and how they have helped me grow

14 Provide assistance with understanding material in the field, especially more complex concepts

5 Help mentees see value in making connections and networking

10 Introduce my mentees to others in the field

15 Help my mentees see the best in themselves and set big, exciting goals

Circle the same numbers you circled above here:

1 3
12

4 7
9

11 6
14

2 15
13

5 8
10

Based on the numbers you circled above, consider which of the following mentorship styles you are most naturally inclined to:

1, 3, 12: The Challenger

This type of mentor will push a mentee to be their best, asking hard questions and helping them stay accountable to their goals and deadlines. Challengers tend to be firm, focused, and detail-oriented.

4, 7, 9: The Cheerleader

This type of mentor is positive, supportive, and reassuring. They will help mentees build confidence and validate their work while encouraging them to keep growing and celebrating their progress.

6, 11, 14: The Educator

This type of mentor has a lot to teach a mentee, and they're ready to share their advice. Educators focus on teaching, training, and helping mentees gain a detailed understanding of their project to break down problems and find stronger solutions.

2, 13, 15: The Ideator

This type of mentor loves brainstorming and creative problem solving. Ideators focus on thinking and planning, working towards ambitious goals and encouraging mentees to dream big.

8, 5, 10: The Networker

This type of mentor is a confident communicator who can help mentees connect with others. Connectors might help connect mentees with other people who can help in their journey or help them better understand how to network.

THINGS TO CONSIDER WHEN YOU'RE LOOKING FOR A MENTOR

According to Liz Elting, contributor for Forbes

Whether it's your PI, a research scientist, another graduate student, a staff member, or someone outside of the university -- graduate school gets easier when you have someone to mentor you! Here are some things to keep in mind when you are looking for a mentor or mentors:

Figure out what you want out of this relationship.

What does success look like, not to everyone else, but to you? Where do you want your career to be in a year? In five years? What will it take to get there? And critically, who do you need in your corner? Answering those questions will help you define what a successful mentor/mentee relationship looks like for you.

Find a champion with similar values and more experience.

A mentor must, above all else, believe in you and your goals. Having a mentor who has been where you are, understands the challenges ahead, and has already navigated over, around, and under them will make a world of difference. The same is true for you as well by the way; you need a mentor that you believe in!

Your mentor doesn't have to be the CEO.

While it may be tempting to seek the most senior, powerful person in the room, be flexible and consider other options. Consider mentors who can grow along with you. Don't think about this relationship as a stepping stone, but instead as a career-long partnership where you can learn and rise in the ranks together.

Je ne sais quoi (that special something!).

You need a mentor who gets you. Someone with whom you enjoy spending time, whose words inspire you, and whose friendship energizes you. Essentially, finding someone you just click with. You need someone with a communication style that matches your own, who can really listen and provide honest, constructive feedback.

Do your homework.

What does success look like, not to everyone else, but to you? Where do you want your career to be in a year? In five years? What will it take to get there? And critically, who do you need in your corner? Answering those questions will help you define what a successful mentor/mentee relationship looks like for you.



IMPRESSIONS OF TEXAS A&M:

IMPRESSIONS OF MY PROGRAM:





POSTER & TALK NOTES

