Name: **Faiga Magzal** **Date: 30.07.2025**

CURRICULUM VITAE

1. Personal Details

Permanent Home Address: Gush Halav, 298 1387200 - Israel

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2. Higher Education

A. Undergraduate and Graduate Studies

Period of Study	Name of Institution and Department	Degree	Year of Approval of Degree
10/2013-06/2017	Bar-Ilan University	PhD Medical Sciences	2017
10/2009-06/2015	Tel-Hai Academic College	BSc Nutrition	2015
10/1996-06/1999	Technion - Israel Institute of Technology	MSc Biotechnology and Food Engineering	1999
02/1989-12/1993	Maua Institute of Technology	BSc Food Engineering	1993

B. Post-Doctoral Studies

Period of Study	Name of Institution, Department and Host	Degree	Year of Completion
8/2021-1/2022	Department of Medical and Surgical Sciences – University of Bologna (UNIBO), Italy, Professor Patrizia Brigidi	Post-Doc	2022
04/2017-12/2019	MIGAL-Galilee Research Institute/ Laboratory of Nutrition and Human Health, Professor Snait Tamir	Post-Doc	2019

3. Academic Ranks and Tenure in Institutes of Higher Education

Since previous promotion

Dates	Name of Institution and Department	Rank/Position
1/2023-present *	MIGAL-Galilee Research Institute - Laboratory of Nutrition and Human Health	Senior Researcher
11/2019-12/2022	MIGAL-Galilee Research Institute - Laboratory of Nutrition and Human Health	Research Fellow
2022	The University of Haifa -Cheryl Spencer Department of Nursing - Faculty of Social Welfare & Health Sciences	Lecturer
2017-present	Tel-Hai College - Food Science and Nutrition Science Departments	Lecturer

4. Scholarly Positions and Activities outside the Institution

Since previous promotion

Date	Activity
30.05.2025	* Presentation "Exploring the Impact of Integrative Autism Therapy on the Overall Improvement of High-Functional Autistic Children and the Role of the Gut Microbiota and its Metabolites as Mediators", Nazareth, Israel
12-2023	* Presentation "The link between diet, gut microbiota, and Parkinson's disease" at the Parkinson's Association in Israel, Tiberias branch

Date	Activity
06/2021-present	Review Editor in Gut-Brain Axis, Frontiers in Neuroscience Journal Q1 (I.F. 5.152)
11/2023	* Co-leader in the special issue "Insights into the Gut Microbiome and Age-Related Health, Microbiome Research Reports (ISSN: 2771-5965).
12/2023-present	* Co-editor on the topic "Early-life gut microbiota perturbations and its impacts on host health: from underling mechanisms to therapeutic opportunities", Frontiers in Microbiology (ISSN 1664302X).

5. Participation in Scholarly Conferences

Since previous promotion

a. Active Participation

Date	Name of Conference	Place of Conference	Subject of Lecture/Discussion	Role
04/2025	* WW FINGERS Network Meeting	On-line	COGNILIFT - The Israeli multidomain lifestyle intervention trial for preventing cognitive decline based on the FINGER model	**Oral (invited):** Magzal F, Turroni S., Korosi, A
11/2022	* Nutrition and Nutraceuticals	Rome, Italy	The impact of diet on depression symptoms and psychological wellbeing among older adults	**Oral (invited):** Magzal F, Fabbrini M, Barone M, Turroni S, Tamir S
02/2019	MIGAL Annual Congress	Kiryat Shmona	Sleep quality is associated to SCFAs levels and changes in gut microbiota composition	**Oral (invited):** Magzal F, Even C, Haimov I, Agmon M, Shochat T, Tamir S
12/2014	The 30th Annual Meeting of the Israeli Society for Oxygen and Free Radicals Research ISOFRR	Haifa	Circulating Oxidized Albumin Is a Mediator of Endothelial Dysfunction in Uremia	**Oral:** F, Szuchman-Sapir A, Tamir S, Sela S, Michelis R, Kristal B
11/2013	International ASN Conference: Kidney Week	Atlanta, GA USA	Circulating Oxidized Albumin Is a Mediator of Endothelial Dysfunction in Uremia	**Oral:** Magzal F, Szuchman-Sapir A, Tamir S, Sela S, Michelis R, Kristal B

b. Organization of Conferences or Sessions

Date	Name of Conference/Session	Place of Conference	Subject of Conference	Role
11.7.2024	* Food-Tech Tel Hai	Tel Hai College – Ayelet Ha-shahar	Food-Tech	Part of the organizing committee
29.6.2023	* Food Sec&Tech Israel – The International Food Security Summit 2023	Tel Hai College	Food-Tech Food Security	Part of the organizing committee
07.2022	* Argentinean Procordoba Delegation Visit	Tel Hai College	Food-Institute	Presenter

6. Invited Lectures\ Colloquium Talks

Since previous promotion

Date	Activity
22.7.2024	* **Invited lecture:** The microbiome, food technology and nutrition. Food Techies תובנית הכשרה. Innovation academy
12.2023	* **Invited lecture:** "The link between diet, gut microbiota, and Parkinson's disease" at the Parkinson's Association in Israel, Tiberias branch

8. Research Grants

Since previous promotion

a. Grants Awarded

Role in Research	Co-Researchers PI	Topic	Funded by/ Amount	Year
PI and coordinator *	Silvia Turroni (Italy), Aniko Korosi (The Netherlands)	COGNILIFT: Improving COGNItive health through LIFesTyle and polyphenol-based intervention	ERA-Health "Modulation of brain ageing through nutrition and healthy lifestyle" (NutriBrain) **678,309.79 €**	2025-2027
PI *	Karen Jackson (Co-PI), Paula Pitashni (Co-PI)	Investigating the Impact of Fermentation of Alternative Proteins on Microbiome Composition and Metabolite Production Using an *In Vitro* Bioreactor System and the Subsequent Effects on Zebrafish Larvae Behavior	JNF Holland and Tel Hai College **72,000 €** (budget for a post-doctoral researcher)	2025-2026
PI *	Andrea Szuchman Sapir (Co-PI); Roee Gutman (Co-PI); Soliman Khatib (Co-PI)	Impact of Food Processing on Metabolic Health and the Gut-Brain Axis: A Comparative Study of Ultra-Processed and Minimally Processed Plant-Based Foods	MIGAL **200,000 NIS**	2024-2026
PI *	Jameel Andrawes (Co-PI), Noam Karsh (Co-PI), Omer Horovitz (Co-PI)	Exploring the Impact of Integrative Autism Therapy on the Overall Improvement of High-Functional Autistic Children and the Role of the Gut Microbiota and its Metabolites as Mediators	Tel Hai College **20,000 NIS**	2024-2025

PI *	Karen Jackson (Co-PI), Sanaa Musa (Co-PI), Paula Pitashny (Co-PI), Jameel Andrawes (Co-PI)	Exploring the Impact of Gut Metabolites from Children with Autism Spectrum Disorder on Social Behavior and Gene Expression in Zebrafish Larvae	Tel Hai College **20,000 NIS**	2024-2025
PI *	Karen Jackson (Co-PI), Paula Pitashni (Co-PI)	The gut microbiota composition and metabolite profile of depressed elderly and their effect on zebrafish behavior.	Tel Hai College **40,000 NIS**	2023-2024
Co-PI	Omer Horovitz (PI), Lili Nimri (Co-PI), Elias Nasralla (Co-PI)	The Association of maternal prenatal psychological stressors and destress, diet pattern, early infant bacterial and metabolite profiles and growth indices	TelHai College **20,000 NIS**	2021-22 (1 Year)

b. <u>Submission of Research Proposals – Pending</u>

Role in Research	Co-Researchers	Topic	Funded by	Year
Co-PI *	Moshe Farchi (PI), Soleiman Khatib, Ari Meerson, Guy Horev, Sivan Raz	Integrating Neural, Psychobiological, Biochemical, and Genetic Models with Machine Learning to predict and Explore PTSD Underpinnings in Emergency Medical Service Workers	Wellcome Trust Fundation: Applying neuroscience to understand symptoms in anxiety, depression & psychosis, UK £1,000,000	2025-2030
Co-PI *	Loai Basheer (PI)	Fermentation-Enhanced Lupine Proteins for Clean-Label Binding and Structuring in Plant-Based Meat	GFI 249,975US$	2026-2028

c. <u>Submission of Research Proposals – Not Funded</u>

Role in Research	Co-Researchers	Topic	Funded by	Year	Score
Co-PI *	Adi Vitman Schorr PI-Israel) and Béla Weiss (PI-Hungary)	**IQOL-AI4MI** - **I**mproving the **Q**uality **O**f **L**ife in old age by **A**rtificial **I**ntelligence-assisted **M**ultimodal **I**ntervention	Hungarian - Israeli Scientific Research Proposal - Ministry of Science and Technology 499,900 NIS	2025-2027	
PI*	Sanna Musa	Fibers extracted from chickpeas as functional food ingredients: their impact on the microbiome composition and on the physical chemical characteristics of food products	Israel Innovation Authority 1,100,000 NIS	2025-2027	
PI *	Sanna Musa, Reddivari, Lavanya -	Turning Waste into Wellness: Harnessing the	BARD-MOST $130,000	2025-2028	

	(USA, U. Purdue)	Power of Orange Peels for Food Product Innovation			
Partner (Tel Hai College team) *	The Hebrew University of Jerusalem (PI), Tel Aviv University, Ben Gurion University of the Negev, Bar Ilan University, Ariel University	A National Complex Hubs-and-Spokes Center (CHAS) on Nature-Based Proteins for Sustainable Food Systems and Nutrition	VATAT Program to support research hubs in the areas of food systems and sustainable nutrition 1,984,000 NIS (Tel Hai's budget)	2025-2028	
PI *	Andrea Szuchman Sapir (Co-PI); Roee Gutman (Co-PI); Soliman Khatib (Co-PI)	Impact of Food Processing on Metabolic Health and the Gut-Brain Axis: A Comparative Study of Ultra-Processed and Minimally Processed Plant-Based Foods	Ministry of Science and Technology 499,962 NIS	2024-2027 (3 Years)	
PI *	Andrea Szuchman-Sapir (Co-PI), Roee Guttman (Co-PI), Soliman Khatib (Co-PI)	Innovative plant-based processed food as a solution to climate change: Health score	משרד החקלאות ופיתוח הכפר 1,010,000 NIS	2024-2026	
PI	Dr. Andrea Szuchman-Sapir (PI), Dr. Roee Gutman, Dr. Silvia Turroni	How do production methods used to manufacture ultra-processed foods affect health outcomes? An in-vivo study	Israeli Ministry of Health 600,000 NIS	2022 (1 Year)	
PI	Snait Tamir (CI), Lili Nimri (CI), Omer Horovitz	A novel tailored personal nutritional intervention in the tight interplay between eating habits and psychological affective symptoms: in search of a possible microbiota dependent mechanism	Israel Society Foundation (ISF) 350,324 NIS	2021 (4 Years)	
PI	None	Exploring the effects of a probiotic, prebiotic or synbiotic treatment of ADHD symptoms in teenagers	2020 Brain and Behavior Research Foundation $70,000	2020 (2 Years)	
PI	Patrizia Brigidi Co-PI, Bologna, Italy, Sophie Layé (Co-PI, Bordeaux, France)	Personalised lifestyle for the prevention of undernutrition	ERA-HDHL (Development of targeted nutrition for prevention of undernutrition for older adults - PREVNUT) € 499,932	2020 (3 Years)	

PI	Snait Tamir (CI), Lili Nimri (CI), Omer Horovitz, Jamil Andrawes (CI)	Can a personalized dietary intervention reduce stress and anxiety in adolescents by gut microbiota and inflammation mechanisms?	Waterloo Foundation £59,590	2020 (3 Years)	

9. Scholarships, Awards and Prizes

Years	Name of Award	Other Awardees	Purpose of Award or Achievement	Source
2013-2106	Scholarship of Excellence for doctoral students of the Arab society and minorities	none	Doctoral funding	Council for Higher Education

10. Teaching

Since previous promotion

Courses Taught in Recent Years

Years	Name of Course	Type of Course	Level	Number of Students
2023-present *	Principles of Food Preparation (1st and 2nd Years)	Laboratory	BSc	40
2009-2016	Food Analysis – laboratory (chemistry)	Laboratory	BSc	40
2009-present	Food Product Development	Workshop	BSc	40
2017-2018	Global Health	Workshop	BSc	20
2017-2018	Nutrition in the Community (public health)	Workshop	BSc	15
2017-2023	Principles of food technology	Lecture	BSc	40
2017-present	Principles of Food Preparation	Lecture	BSc	80-100
2019-present	The interrelationship between food technology, microbiota and health	Lecture	BSc	20-30
2021-2022	Clinical Nutrition	Lecture	BSc	130

a. Supervision of Graduate Students

Name of Student	Main advisor	Associate supervisor	Title of Thesis	Degree	Year of Completion / in Progress	Student's Achieve-ments
Carmel Even *	Neal Elias – Bar Ilan University	Faiga Magzal	Prebiotics for Modulating the Gut Microbiome and Alleviating Autism Spectrum Disorder Symptoms	PhD	in progress (2024-2028)	-
Adi Gal Yaaran *	Alon Reshef - Technion	Faiga Magzal	Exploring the Therapeutic Potential of a Nutritional Supplement Based on Mushrooms for Alleviating Chronic Fatigue Symptoms: Elucidating Mechanisms and Identifying Emerging Biomarkers	PhD	in progress (2023-2027)	-
Yuval Molcho *	Faiga Magzal	Karen Jackson	Investigating the Modulatory Impact of Melatonin on Gut Microbiota Metabolites using an In Vitro Fermentation System and Assessing their Subsequent Effects on Sleep Behavior of Zebrafish Larvae	MSc	in progress (2023-2025)	-
Gili Nahmani *	Faiga Magzal	Paula Pitashny	Xylo-Oligosaccharides Impact on Gut Microbiome and Metabolites	MSc	in progress (2023-2025)	-
Noa Mathias *	Faiga Magzal	Roee Gutman	The Effect of Plant Based Ultra-Processed Food on Metabolic Profiles of Mice	MSc	in progress (2023-2025)	-

Name of Student	Main advisor	Name of Associate supervisor	Title of Thesis	Degree	Year of Completion / in Progress	Student's Achieve ments
Oren Klein *	Faiga Magzal	Snait Tamir	Associations between metabolite concentrations, depression, quality of life, and food intake in older adults	MSc	in progress (2022-2025)	Final score 92
Lital Fadida	Snait Tamir	Faiga Magzal	The effect of a microbiota based personalized diet on depressive symptoms in the elderly	MSc	2021	-
Carmel Even	Faiga Magzal	Snait Tamir	Isolation and characterization of SCFAs, and their association to gut microbiota abundances, nutritional intake, and quality of life among elderly with insomnia	MSc	2021	"Magna cum laude"

11. Miscellaneous

12. Professional Experience

2007-2008: Unilever Israel - R&D Food engineer at the chocolate and cereal bars unit

A member of the R&D team. I participated in the development of new chocolate products (Klik) and protein-rich cereal bars. My responsibilities also included the identification of suitable raw materials for new/improved product formulations in and outside Israel and food product upscale.

1995-1996: Oxiteno Company –Food Engineer, Brazil

A QA team member. I was responsible for controlling and assuring the quality of the products and processes developed by the company. I was designated to visit the company's production plants in Brazil, analyze product samples, report malfunction, and propose feasible solutions.

1993-1995: Nestle company – Dairy and Chocolate Plants, Brazil (Sao Jose dos Campos and Barra Mansa).

A QC team member of the largest dairy and chocolate production plants in South America. I controlled the quality of milk, milk products, and chocolate and performed the chemical and sensory analysis of the company's products. I was also involved in R&D projects.

PUBLICATIONS

Since previous promotion

A. Ph.D. Dissertation

Title:	Circulating Modified/Oxidized Albumin is a Mediator and a Biomarker for Endothelial Dysfunction, Underlying Cardiovascular Disease in Uremic Patients
Date of submission:	11/2016
Number of pages:	80
Language:	English
Name of supervisor:	Prof. Batya Kristal
University:	Bar Ilan University
Publications: item no. from the list of publications	12

C. Scientific Publications

Articles in Refereed Journals

H-index:	10	**Source:** Google Scholar
Citation index:	539	**Source:** Google Scholar
ORCID number:	0000-0003-0975-1858	
Google Scholar link:	https://scholar.google.ca/citations?view_op=list_works&hl=en&user=PyKImBwAAAAJ	

Published

***Since previous promotion**

**** equal contribution # corresponding author***

Article	Cited by
1. Levy Schwartz M.*, **Magzal F.*#**, Yehuda I., Tamir S. Exploring the impact of probiotics on adult ADHD management through a double-blind RCT. *Scientific Reports* **2024**, 14 (1), 26830. doi: https://doi: 10.1038/s41598-024-73874-y **(I.F. 3.8, Q1, Multidisciplinary)** *	2

2. Steckler R.; **Magzal F.**; Kokot M.; Walkowiak J.; Tamir S. Disrupted gut harmony in attention-deficit/hyperactivity disorder: Dysbiosis and decreased short-chain fatty acids. *Brain, Behavior, & Immunity-Health* **2024**, 40, 100829. doi: https://doi.org/10.1016/j.bbih.2024.100829 **(I.F. 3.7, Q1, Psychiatry and Mental Health)** *	9
3. Naveh, G.; Mansour, B.; Bader, M.; Steckler, R.; Nasrallah, E.; Hujeyrat, H.; **Magzal, F**.; Elias, N.; Horovitz, O.; Nimri, L. Physiological Impacts of Energy Drink Consumption: A Clinical Analysis in Adolescents. *Nutrients* **2024**, 16, 2328. doi: https://doi.org/10.3390/nu16142328 **(I.F. 4.8, Q1, Nutrition and Dietetics)** *	2
4. Even, C.*; **Magzal, F.*#**; Shochat, T.; Haimov, I.; Agmon, M.; Tamir, S. Microbiota Metabolite Profiles and Dietary Intake in Older Individuals with Insomnia of Short vs. Normal Sleep Duration. *Biomolecules* **2024**, *14*, 419. doi: https://doi.org/10.3390/biom14040419 **(I.F. 4.8, Q1, Biochemistry)** *	3
5. **Magzal F#**, Turroni S, Fabbrini M, Barone M, Vitman Schorr A, Ofran A, Tamir S. A personalized diet intervention improves depression symptoms and changes microbiota and metabolite profiles among community-dwelling older adults. *Front Nutr.* **2023** Sep 14;10:1234549. doi: https://10.3389/fnut.2023.1234549. **(I.F. 4.0, Q2, Nutrition and Dietetics)** *	13
6. Pinto Y, Frishman S, Turjeman S, Eshel A, Nuriel-ohayon M, Walters W, Parsonnet J, Ley C, Johnson EL, Schweitzer R, Khatib S, **Magzal F**, Tamir S, Gavish KT, Rautava S, Salminen S, Isolauri E, Yariv O, Peled Y, Poran E, Pardo J, Chen R , Hod M, Ley RE Schwart B, Hadar E, Louzoun Y, Koren O. Gestational diabetes is driven by microbiota-induced inflammation months before diagnosis. *Gut*, **2023** 72(5), 918–928. https://doi.org/10.1136/gutjnl-2022-328406 **(I.F. 31.795, Q1, Gastroenterology)** *	107
7. Rafael G, Riess HT, Levi CS, **Magzal F**, Tamir S, Koren O, Lesmes U. Responses of the human gut microbiota to physiologically digested insect powders or isolated chitin thereof. *Future Foods* **2022**; 100197 Elsevier https://doi.org/10.1016/j.fufo.2022.100197 **(I.F. 7.2, Q1, Food Science)** *	20
8. Haimov I*, **Magzal F*#**, Tamir S, Lalzar M, Asraf K, Milman U, Agmon M*, Shochat T*. Variation in Gut Microbiota Composition is Associated with Sleep Quality and Cognitive Performance in Older Adults with Insomnia. *Nat Sci Sleep* **2022**;14:1753-1767 https://doi.org/10.2147/NSS.S377114 **(I.F. 5.3, Q2, Behavioral and Neuroscience)**	20
9. **Magzal F#**, Shochat T, Haimov I, Tamir S, Asraf K, Tucher-Arieli M, Even C, Agmon M. Increased physical activity correlates with gut microbiota composition and reduces short-chain fatty acid concentrations in older adults with insomnia. *Sci Reports* **2022**. https://doi.org/10.1038/s41598-022-05099-w **(I.F. 4.3, Q1, Multidisciplinary)**	54
10. **Magzal F#**, Even C., Haimov I, Agmon M, Asraf K, Shochat T, Tamir S. Associations between fecal short-chain fatty acids and sleep continuity in older adults with insomnia symptoms. *Sci Rep* **2021** 11, 4052. https://doi.org/10.1038/s41598-021-83389-5. **(I.F. 4.3, Q1, Multidisciplinary)**	58
11. Goldberg MR, Mor H, Magid Neriya D, **Magzal F**, Muller E, Appel MY, Nachshon L, Borenstein E, Tamir S, Louzoun Y, Youngster I, Elizur A, Koren O. Allergic microbial signature in IgE-mediated food allergies. *Genome Medicine*. **2020** Oct 27;12(1):92. doi: https://10.1186/s13073-020-00789-4. **(I.F. 10.7, Q1, Molecular Medicine)**	110
12. Tzemah Shahar R, Koren O, Matarasso S, Shochat T, **Magzal F**, Agmon M. Attributes of Physical Activity and Gut Microbiome in Adults: A Systematic Review. *International Journal of Sports Medicine*	51

2020, doi: https://10.1055/a-1157-9257. **(I.F. 2.6, Q1, Physical Therapy, Sports Therapy and Rehabilitation)**	
13. **Magzal, F.#**, Sela, S.; Szuchman-Sapir, A.; Tamir, S.; Michelis, R.; Kristal, B. In-vivo oxidized albumin- a pro-inflammatory agent in hypoalbuminemia. *PLoS ONE* **2017**, *12*, e0177799, doi: https://10.1371/journal.pone.0177799. **(I.F. 2.8, Q1, Multidisciplinary)**	48
14. Yehuda, I.; Madar, Z.; Leikin-Frenkel, A.; Szuchman-Sapir, A.; **Magzal, F.**; Markman, G.; Tamir, S. Glabridin, an isoflavan from licorice root, upregulates paraoxonase 2 expression under hyperglycemia and protects it from oxidation. *Molecular Nutrition & Food Research* **2016**, *60*, 287–299, doi: https://10.1002/mnfr.201500441. **(I.F. 4.7, Q1, Biotechnology)**	40

Submitted Publications

Gali Levin; Sondra Turjeman; Kfir Asraf; Nofar Asulin; Gila Gamliel; Yarden Shir Bismut; **Faiga Magzal**; Snait Tamir; Omry Koren; Yoram Louzoun; Ami Cohen; Iris Haimov. Similarity in Short Chain Fatty Acids Profiles Predicts Smoking Cessation **(iScience, I.F. 4.1, Q1, Multidisciplinary)**

Research summary and future plans:

My research primarily investigates the complex interplay between nutrition, the gut microbiome, and human health, with a particular focus on how gut-derived metabolites influence neurological and psychological outcomes via the gut-brain axis. A significant aspect of my work involves examining the relationship between microbial metabolites, especially short-chain fatty acids (SCFAs), and mental health conditions such as insomnia and depression. I have identified distinct metabolite profiles in individuals suffering from these conditions that correlate with sleep disruption and cognitive impairment. This insight drives my efforts to develop dietary interventions that can positively modulate the gut microbiome to enhance mental well-being. Additionally, I explore the effects of food processing on metabolic health and behavior. My ongoing in vivo project contrasts ultra-processed versus minimally processed plant-based foods to assess their impact on gut microbiota and related health outcomes. Supported by substantial funding, this study aims to unveil the molecular mechanisms linking food processing and the gut-brain connection. I am also investigating the role of the gut microbiome in neurodevelopmental disorders, particularly autism spectrum disorder (ASD). Through collaborative research, I've developed prebiotic-based strategies to support children with ASD, demonstrating promising outcomes related to behavioral improvements and metabolite changes following integrative therapy.

Looking ahead, I am leading the COGNILIFT project, funded by the ERA NutriBrain initiative with a grant of €678,000. This initiative aims to prevent cognitive decline in older adults through a comprehensive lifestyle intervention inspired by the Finnish FINGER study. Our upcoming 6-month randomized controlled trial will integrate various dimensions, including nutrition, physical activity, cognitive training, social engagement, and cardiovascular health, with a goal of assessing cognitive improvements and biological markers. Furthermore, I plan to expand my research on dietary fibers and alternative proteins using in vitro fermentation models to better understand their impact on the gut microbiome and the production of bioactive compounds. This research will contribute to developing targeted nutritional supplements to improve mental health and cognitive performance. Another significant area of focus will be the continued exploration of the gut microbiome's influence on neurodevelopmental disorders. I aim to advance our understanding of the gut-

brain axis in children with ASD and other neurodevelopmental conditions, paving the way for future preclinical and clinical studies that could inform innovative therapeutic strategies. Through these endeavors, I hope to contribute valuable insights into the intricate relationships between diet, microbiota, and psychological health, ultimately leading to evidence-based interventions that can improve health outcomes for various populations.