

Emrah Altindis, MSc, Ph.D.

Updated October, 2024

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ACADEMIC POSITIONS

September 2018- **Assistant Professor**, Biology Department, Boston College
February 2019- **Adjunct Faculty**, Joslin Diabetes Center & Harvard Medical School
2017-2018 **Instructor**, Joslin Diabetes Center & Harvard Medical School

EDUCATION

September 2014- September 2018 **Postdoctoral Researcher** with Prof. C. Ronald Kahn
Harvard Medical School, Joslin Diabetes Center (Boston, MA)
August 2011–September 2014 **Postdoctoral Researcher** with Prof. John Mekalanos
Harvard Medical School (Boston, MA)
June 2007-May 2011 **Ph.D.**, Bologna University (Bologna, Italy) & Novartis Vaccines
(Siena, Italy)
September 2004- May 2007 **MSc.**, Middle East Technical University (Ankara, Turkey).
September 2000-June 2004 **B.A.**, Ege University (Izmir, Turkey)

GRANTS

<u>Ongoing Support</u>	*total costs
2024-2028 NIH NIDDK Research Project (R01) Grant (DK132674) Viral insulin-like peptides and their unique activities on mammalian insulin/IGF-1 system Altindis E (PI)	\$2,544,421
2023-2025 Beatson Foundation, Passion to Find A Cure Grants (# 2023-003) Determine the Role of Microbiota Derived Insulin Epitope Mimics in Type 1 Diabetes Onset Altindis E (PI)	\$275,000
2023-2024 D-challenge Competition. first place award Uncovering the Role of Microbiome Derived Autoantigen Mimics in Type 1 Diabetes The Altindis Lab team (D. Dogru, A. Randall, K. Girdhar)	\$30,000

Completed Support

2020-23 The Mathers Foundation Research Award (MF-2006-00926) \$300,000
The Role of Gut Microbes and Metabolites in Childhood Celiac Disease Pathogenesis
Altindis E (PI)

2022-23 JDRF Innovative Award (1-INO-2022-1108-A-N) \$110,000
Microbial Insulin Mimics and Humoral Immune Response in Type 1 Diabetes onset
Altindis E (PI)

2019-22 The Mathers Foundation Research Award (MF-1905-00311) \$300,000
The Role of Microbial Insulin Mimics in Type 1 Diabetes Autoimmunity
Altindis E (PI)

2018-21 NIH, NIDDK K01 Research Scientist Development Award (3K01DK117967) \$445,357
Viral Insulin-like Peptides (VILPs) and Their Activities on Mammalian Cells
Altindis E (PI)

Pending Support (in review)

2025-2030 NSF CAREER (2443211) Requested amount: \$1,653,147
Integrating research and training to determine the role of viral insulin/IGF-1 like peptides in host-pathogen interactions
Altindis E (PI)

2025-2027 ACS Discovery Boost Grants (ID#: 1432812) Requested amount: \$297,000
Determine the Effects of Novel Viral Peptide Inhibitors of the IGF-1 Receptor in Breast Cancer Models
Altindis E (PI)

2025-2026 The Institute for the Liberal Arts (Major Grants) Requested amount: \$25,000
Casper Augustus Ferguson Seminar Series: Cultivating Diversity and Role Models in STEM through Boston College's Liberal Arts Approach
Altindis E (PI), Supported by Avneet Hira (Engineering), Leah Gordon (Nursing) Laura J. Steinberg, (Schiller)

FELLOWSHIPS AND TRAINING GRANTS FOR THE ALTINDIS LAB TRAINEES

2023-2024 Diabetes Research Connection Research Grant
Immunoglobulin A (IgA) signature in the gut microbiome of T1D progressors \$50,000
PI: Khyati Girdhar, PhD

2024-2025 Diabetes Research Connection Research Grant
Determine the Role of Viral Infections and viral-insulin carrying viruses in T1D pathogenesis. \$50,000
PI: Aurelien Chuard, PhD

2024-2026 Manpei Suzuki Diabetes Foundation
Determine the Role of Gut Microbes in Type 1 Diabetes Pathogenesis \$105,000
PI: Keiichiro Mine, PhD

PUBLICATIONS

Altindis Lab members are underlined,
Undergraduate researchers identified with +,
Corresponding authors identified with *.

Peer-reviewed Research Articles

At Boston College

1. Chrudinová M[#], Kirk NS, Chuard A[#], Venugopal H, Zhang F, Lubos M, Gelfanov V, Páníková T, Žáková L, Cutone J⁺, Mojares M⁺, DiMarchi R, Jiráček J, Altindis E^{*}. A Viral Insulin-like Peptide Inhibits IGF-1 Receptor Phosphorylation and Regulates IGF1R Gene Expression. **Molecular Metabolism**. 2024 Feb;80:101863
2. Girdhar K, Dogru DY, Huang Q, Yang Y, Chrudinova M, Raisingani A⁺, Oh J⁺, Tolstikov V, Kiebish MA, Kelley K, Ludvigsson JF, Palm NW, Ludvigsson J, Altindis E^{*}. Dynamics of Gut Microbiome, IgA Response and Plasma Metabolome in Development of Pediatric Celiac Disease. **Microbiome**. 2023 Jan 13;11(1):9. doi: 10.1186/s40168-022-01429-2.
3. Moreau F, Kirk NS, Zhang F, Gelfanov V, List EO, Chrudinová M, Venugopal H, Lawrence MC, Jimenez V, Bosch F, Kopchick JJ, DiMarchi DR, Altindis E, Kahn CR. Interaction of a viral insulin-like peptide with the IGF-1 receptor produces a natural antagonist. **Nature Communications**. 2022 Nov 5;13(1):6700.
4. Girdhar K, Huang Q, Chow I, Raisingani A⁺, Brady C⁺, Atkinson M, Kwok W. Kahn CR*, Altindis E^{*}. A Gut Microbial Peptide and Molecular Mimicry in the Pathogenesis of Type 1 Diabetes. **PNAS**. 2022 Aug 2;119(31):e2120028119
5. Girdhar K, Soto M, Huang Q, Orliaguet L, Cederquist C, Sundaresh B, Hu J, Figura M⁺, Raisingani A⁺, Canfora EE, Dirice E, Fujisaka S, Goossens GH, Blaak EE, Kulkarni RN, Kahn CR*, Altindis E^{*}. Gut Microbiota Regulate Pancreatic Growth, Exocrine Function and Gut Hormones. **Diabetes**, 2022 Feb 25;db210382. doi: 10.2337/db21-0382.
6. Garcia-Martin R, Brasil Brandao B, Altindis E^{*} and Kahn CR*. Tissue Differences in the Exosomal/Small Extracellular Vesicle Proteome and Their Potential as Indicators of Altered Tissue Metabolism. **Cell Reports**, 2022 Jan 18;38(3):110277.
7. Zhang F, Altindis E, Kahn CR, DiMarchi RD, Gelfanov V. A Viral Insulin-Like Peptide is a Natural Competitive Antagonist of the Human IGF-1 Receptor. **Molecular Metabolism**. 2021 Aug 13;101316.
8. Chrudinová M, Moreau F, Noh HL, Páníková T, Žáková L, Friedline R, Valenzuela F, Kim J, Jiráček J, Kahn CR, Altindis E^{*}. Characterization of Viral Insulins Reveals White Adipose Tissue Specific Effects in Mice. **Molecular Metabolism**. 2020 Nov 18;101121

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9. Altindis E, Cai W, Sakaguchi M, Zhang F, Guoxiao W, Liu F, Gelfanov V, De Meyts P, DiMarchi R and Kahn CR. Viral insulin-like peptides activate human insulin and IGF-1 receptor signaling: A paradigm shift for host-microbe interactions. **PNAS**, 2018 Mar 6;115 (10):2461-2466.

10. Fujisaka S., Pacheco JA., Soto M., Kostic Aleksandar, Dreyfuss JM., Pan H., Ussar S., **Altindis E.**, Li N., Bry L., Clish CB., and Kahn CR. Diet, genetics and gut microbiome drive dynamic changes in plasma metabolites. **Cell Rep.** **2018** Mar 13;22 (11):3072-3086.
11. Fujisaka S, Ussar S, Clish C, Devkota S, Dreyfuss J, Sakaguchi M, Konishi M, Softic S, **Altindis E et al.** Antibiotic Modification of Gut Microbiota Improves Insulin Signaling Via Effects on Bile Acids Depending on Host Genetics. **J Clin Invest.**, **2016** Dec 1;126 (12):4430-4443.
12. **Altindis E**[&], Dong T[&], Catalano J, Mekalanos JJ. Secretome analysis of *Vibrio cholera* Type VI Secretion System reveals a new effector-immunity pair. **MBio**, **2015** Mar 10;6 (2):e00075. [&] equal contribution
13. **Altindis E**, Cozzi R, Di Palo B, Neccho F, Mishra PR., Fontana MR, Soriani M, Bagnoli F, Maione D, Grandi G, Liberatori S. Protectome analysis: a new selective bioinformatics tool for bacterial vaccine candidate discovery. **Mol Cell Proteomics**, **2015** Feb;14 (2):418-29.
14. **Altindis E**, Fu Y, Mekalanos JJ. Proteomic analysis of the *Vibrio cholera* outer membrane vesicles. **PNAS**, **2014** Apr 15;111 (15):E1548-56.
15. Mishra R, Mariotti P, Fiaschi L., Nosari S., Maccari S., Liberatori S, Fontana M R, Pezzicoli A, Falugi F, **Altindis E et al.** . *Staphylococcus aureus* FhuD2 is involved in the early phase of staphylococcal dissemination and generates protective immunity in mice. **J Infect Dis**, **2012** Oct 1;206 (7):1041-9, 2012.
16. Doro F, Liberatori S, Rodríguez-Ortega MJ, Rinaudo CD, Rosini R, Mora M, Scarselli M, **Altindis E et al.** Surfome analysis as a fast track to vaccine discovery: identification of a novel protective antigen for Group B Streptococcus hypervirulent strain COH1. **Mol Cell Proteomics**, **2009** Jul; 8 (7):1728-37.
17. **Altindis E**, Tefon BE, Yildirim V, Ozcengiz E, Becher D, Hecker M, Ozcengiz G. Immunoproteomic analysis of Bordetella pertussis and identification of new immunogenic proteins. **Vaccine**, **2009** Jan 22; 27 (4):542-8.

Preprints (bioRxiv)

18. Chuard A, Nesarajah K⁺, Reiners K⁺, Danazumi K⁺, Zhang F, Vashisth H, DiMarchi R, **Altindis E***. Viral Insulin-like peptides exploit host IGF1/Insulin pathway during GIV Iridioviridae viral replication. **bioRxiv (2024)**.
bioRxiv link: <https://www.biorxiv.org/content/10.1101/2024.06.13.598936v1>
19. Kelley K, Girdhar K#, Dogru YD, Ludvigsson J, **Altindis E.*** Gut Microbiome Composition and Function in Children Developing Celiac Disease. **bioRxiv (2024)**. (under review).
bioRxiv link: <https://www.biorxiv.org/content/10.1101/2024.06.13.598929v1>
20. Girdhar K, Randall A, Dogru YD, Howard C⁺, Pezzella A⁺, Henao J, Hudcovic T, Schwarzer M, Kiebish MA, **Altindis E***. *Parabacteroides distasonis* and Type 1 Diabetes Onset in NOD mice. **bioRxiv (2024)**.
bioRxiv link: <https://www.biorxiv.org/content/10.1101/2024.06.13.598927v1>
21. Girdhar K, Mine K, DaCosta JM, Atkinson MA, Ludvigsson J, **Altindis E***. Sex-Specific Cytokine, Chemokine, and Growth Factor Signatures in T1D Patients and Progressors. (under review).
<https://www.biorxiv.org/content/10.1101/2024.09.05.611513v1>

Additional Manuscripts in Review

22. Moreau F, Muñoz V, Soto M, Pham L, Zhong J, Zimmerman S, Brandão B, Girdhar K, Avila-Pacheco J, Pan H, Dreyfuss J, **Altindis E**, Kostic AD, Clish C. Kahn CR. Portal Vein Enriched Metabolites as Intermediate Regulators of the Gut Microbiome in Insulin Resistance. **Nature Metabolism**

In preparation, Research Articles (will be submitted in 2024)

1. Chrudinova M, Dogru YD, Huang R⁺, Reiners R⁺, DeMeyts P, DaCosta J, **Altindis E.*** Evolution of insulin, IGF-1, viral insulins and their cognate receptors (will be submitted by 2025)
2. Chrudinova M, Bhattacharjee S, Girdhar K, Dogru YD, Kim J, **Altindis E.*** A Comparative Analysis of Insulin and Viral Insulin Action on Different Metabolic Organs' Transcriptome and Insulin Signaling (will be submitted in 2025)
3. Girdhar K, Vatanen T, Howard C, Pezzella A, Ludvigsson J, **Altindis E.*** Dynamics of Pediatric Gut Microbiome Alterations and IgA Response in the Development of Type 1 Diabetes Pathogenesis (will be submitted in 2025)

Reviews, Chapters and Monographs

At Boston College

1. **Altindis E.** Inequitable COVID-19 vaccine distribution and the intellectual property rights prolong the pandemic. **Expert Rev Vaccines**, 2021 Dec 8. doi: 10.1080/14760584.2022.2014819.
2. Girdhar K, Powis M⁺, Raisingani A⁺, Chrudinová M, Huang R⁺, Tran T⁺, Sevgi K⁺, Dogru YD, **Altindis E.*** Viruses and Metabolism: The Effects of Viral Infections and Viral Insulins on Host Metabolism. **Annu Rev Virol.** 2021 Sep 29;8(1):373-391. *Invited.*
3. Dedrick S, Sundaresh B, Huang Q, Brady C⁺, Yoo T⁺, Cronin C⁺, Rudnicki C⁺, Flood M⁺, Momeni B, Ludvigsson J, **Altindis E.*** The Role of Gut Microbiota and Environmental Factors in Type 1 Diabetes Pathogenesis. *Front Endocrinol (Lausanne)*. 2020 Feb 26; 11:78. *Invited.*
4. Huang Q, Kahn C.R, **Altindis E.*** Viral Hormones: Expanding Dimensions in Endocrinology. **Endocrinology**, 2019, Volume 160, Issue 9, September, 2165–2179. *Invited.*

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5. **Altindis E.** Antibacterial Vaccine Research in 21st Century: From Inoculation to Genomics Approaches. **Current Topics in Medicinal Chemistry**, 2013 October v13:20
6. **Altindis E**, Izulla P. An overview of African health: this time for Africa? Building on 2010 FIFA World Cup success. **Expert Rev Anti Infect Ther**, 2010 Dec; 8(12):1325-8.
7. **Altindis E.** Vaccines for all: Institut Pasteur vaccinology course. **Expert Rev Vaccines**, 2010 Sep; 9(9):1023-6
8. **Altindis E**, Gulce Iz S, Ozgun Ozen M, Nartop P, Deliloglu Gurhan I, Gurel A. Plant Derived Edible Vaccines and Therapeutics. **Frontiers in Clinical Drug Research-Anti-Infectives**, 2014, ISBN: 978-1-60805-855.

In preparation: Invited Reviews (will be submitted in 2024)

1. Kelley K and **Altindis E.*** The Role of Gut Microbes in Celiac Disease Pathophysiology.*
2. Girdhar K and **Altindis E.*** Environmental Factors and Gut Microbiome in Type 1 Diabetes Onset. *
*Invited by the "Gut Microbes"

We have a team of undergraduate students working on these reviews with Dr. Khyati Girdhar and Kristina Kelley.

INVITED TALKS AND PRESENTATIONS

At Boston College

1. Departments of Animal Sciences and Agricultural Chemistry. Graduate School of Agriculture and Life Sciences Life Response course (2 hours-virtual), **The University of Tokyo**. Tokyo, Japan. Host: Prof. Shin-Ichiro Takahashi
2. **Infections and Autoimmunity Workshop** organized by the National Institute of Allergy and Infectious Diseases (NIAID), **NIH**, September 11-12, 2024, Bethesda, MD.
3. **Keynote Speaker. MIT Microbiome Symposium 2024**. March 22, **2024**. Cambridge, MA. Host: Symposium Organizing Committee | MIT Microbiome Club
4. Tracing the Intricate Dance: Investigating Gut Microbes' Role in Autoimmune Diseases. **Northeastern University**, Biology Department Seminar Series. March, 5, **2024**. Boston, MA. Host: Assoc. Prof. Erica Homan
5. Egg or Chicken: Examining causal links between gut microbes and autoimmune diseases Department of Pathology Seminar Series, School of Medicine, **University of Utah**. October 13, **2023**. Salt Lake City, UT. Host: Prof: Brian Evavold.
6. A Microbiota-derived Insulin Epitope Mimic and Type 1 Diabetes Onset. **Keynote Symposia: Mechanisms of Microbiota-Immune Interactions-Towards the Next Decade**. October 8—11, **2023**. Snowbird Resort • Snowbird, UT USA
7. A Human Gut Commensal, *Parabacteroides distasonis* and Type 1 Diabetes Onset. **Festival of Genomics & BioData**, Boston Convention Center October 4-5, **2023**, Boston, MA
8. The Role of Gut Microbes in the Onset of Autoimmune Diseases. Department of Immunology, **Pasteur Institute**. May 22, **2023**, Paris, France. Host: Dr. Gérard Eberl
9. Relearning the insulin/IGF system from the viruses. Centre for Medicines Discovery, **Oxford University**. May 19, **2023**, Oxford, UK. Host: Prof. Valentine M Macaulay
10. **Keynote Speaker**. Viral Insulin/IGF-like Peptides and Their Unique Functions on Insulin/IGF System. **Gordon Research Seminar: The IGF and Insulin System: From Basic Science to Clinical Translation and New Technologies**. March 10-12, **2023**, Ventura, CA, USA
11. A gut commensal, *Parabacteroides distasonis*, and Type 1 Diabetes onset. **International Society of Microbiota**, 9th World Congress on Targeting Microbiota 2022. October 20, **2022**, Paris, France.
12. Learning Insulin/IGF signaling from viruses: Discovery of viral insulins. April 27, 2022. **Brown University**, Providence, Department of Molecular Biology, Cell Biology, and Biochemistry. Host: Prof. Marc Tatar
13. The Discovery of Microbial Insulins and Their Potential Role in Human Disease. November 9, **2021**. **University of Massachusetts, Amherst**, Molecular & Cellular Biology Program Seminar Series. Host: Dr. Can Ozden.
14. The Discovery of Microbial Insulins and Their Potential Role in Human Disease. October 26, **2021**. **Tufts University**, Cell, Molecular & Developmental Biology Department Seminar Series. Host: Prof. Karl Munger
15. Discovery of Microbial Insulin Mimics Leads to the Identification of Unique Characteristics. Institute of Biomedical Investigations, June 23, **2021**, **Autonomous University of Madrid** (Spain, virtual). Host: Prof. Wolfgang Link.
16. Expanding the Dimensions in Insulin Research: Discovery of Viral Insulins. April 30, **2021**. **University of Algarve** (Portugal, virtual), Biomedicine Research Centre. Host: Prof. Maria Leonor Faleiro.
17. Insulin and Viral Insulin Research. **Boğaziçi University** (Istanbul, Turkey, virtual) Science Club. May 22, **2021**. 15. Molecular Biology and Genetics Meeting. Host: Boğaziçi University Science Club
18. Characterization of Microbial Insulin/IGF-1 Mimics. April 14, **2021**. **Boston College** Chemistry Department. Host: Prof. Jianmin Gao
19. Discovery of Microbial Insulin Mimics. April 13, 2021. Host: **Indiana University** Biology Department Seminar Series. Every year, the microbiology graduate students nominate a speaker for a talk, and I was honored to be chosen through their votes, despite not knowing any of them (virtual).
20. Discovery and Characterization of Microbial Insulin Mimics. March 31, **2021**. **Ohio University** (virtual) - Basic and Translational Seminar Series. Host: Associate Prof. Kevin Lee

21. Discovery and Characterization of Microbial Insulins. **Indiana University**, School of Medicine. Department of Microbiology&Immunology. November 12, **2020** (virtual). Host: Prof. Christopher Robinson
22. Discovery of microbial insulin mimics: Do they play a role in diabetes? **North Arizona University**, Pathogen and Microbiome Institute. March 4, **2020**. Host: Prof. Jason Ladner
23. Bridging Virology and Endocrinology: Viral Hormones. **14th Annual Peptide Therapeutics Symposium**, Peptide Therapeutics Foundation/ October 24-25, **2019**, Salk Institute, La Jolla, California
24. Insulin Goes Viral: Characterization of Microbial Insulin Mimics in Human Disease. **University of Minnesota**, Division of Rheumatic and Autoimmune Diseases. 07/24/**2019**. Host: Prof. Brian Fife
25. Viral Endocrinology: Discovery of Viral Insulins. **American Society of Virology Annual Meeting**. July 19-24, **2019**, Minneapolis, MN
26. Gut Microbiota Regulate Pancreatic Growth, Exocrine Function, and Gut Hormones. **79th American Diabetes Association Meeting**. June 7-11, **2019**, San Francisco, CA
27. Expanding Dimensions in Diabetes Research: Discovery of Microbial Insulin mimics. Stanford University Diabetes Research Center, **Stanford University**. June 7, **2019**. Host: Prof. Katrin J. Svensson, Ph.D.
28. Microbial Insulin Mimics in Type 1 Diabetes Autoimmunity. **Gordon Research Conference: IGF and Insulin System in Physiology and Disease**, March 10 - 15, **2019**, Ventura, CA.
29. Expanding Dimensions in Host-Microbe Interactions: Microbial Insulin mimics Center for Infectious Diseases, **University of Texas**, Austin. Center for Infectious Diseases, March 8, **2019**, Austin, USA. Host: Prof. Bryan W Davies, PhD
30. Discovery of Viral Hormones and Characterization of Viral Insulins. Channing Division of Network Medicine Seminar Series, **Harvard Medical School**, January 11, **2019**, Boston, USA. Host: Prof. Yang-Yu Liu, PhD
31. **Keynote Speaker**: Viral insulin-like peptides activate insulin and IGF-I receptor signaling. **43rd Symposium on Hormones and Cell Regulation**, European Society of Endocrinology (ESE). October 10, **2018**. Alsace, France.
32. Discovery of Viral insulins. **Pasteur Institute**, October 5, **2018**, Paris, France. Host: Dr. Frédéric Tangy

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33. Identification of Cross-Reactive Insulin Immunogenic Epitopes from Commensal Gut Microbes. **78th American Diabetes Association Meeting**, June, **2018**, Orlando, USA
34. Viral Insulin-like Peptides Activate Human Insulin and IGF-1 Receptor Signaling: A New Paradigm for Host-Microbe Interactions. January, **2018**. **Joslin Diabetes Center Seminar Series**, Boston, USA.
35. Viral Hormones and Insulins. January, **2018**. **BTBC, Boston**, USA.
36. Viral Insulin-Like Peptides Are New Ligands of Human Insulin and IGF-1 Receptors. June, **2017**, **77th American Diabetes Association Meeting, San Francisco**, CA, USA.
37. Fecal Proteomics Analysis Provides a Novel Window into the Effects of Diet and Gut Microbiome on Host Gut Metabolism. **Cellular Mechanisms and Cell-Based Therapies of Diabetes, 2016**. Boston, MA, USA.
38. MetaVaccinology: A new bacterial vaccine discovery tool. **2011, 5th Vaccine and ISV Annual Global Congress, Seattle**, WA, USA.
39. Proteomics and Vaccinology: a case study for Group B Streptococcus. **2009, 2nd International Workshop on Expression, Structure and Function of Membrane Proteins**, Florence, Italy.

Contributed talks (The Altindis Lab Members, EA corresponding author)

At Boston College

Aurelien Chuard, PhD (Postdoc)

1. **Global Amphibian and Reptile Diseases 2022.** Insulin Goes Viral: The Role of Iridoviridae Viral Insulin/IGF-1 like peptides in a host context infection. GARD Conference- August 2022- Knoxville, TE, USA. Oral Presentation and Travel Award
2. **Gordon Research Seminar: IGF and Insulin System in Physiology and Disease 2023.** Functional Characterization of Viral Insulin/IGF-1 like peptides in host-pathogen Interactions. GRS March 2023, CA, USA. Oral Presentation and Travel Award
3. **NASCE - North American Society for Comparative Endocrinology.** Characterization of Viral Insulin/IGF-1 like peptides in host-pathogen interactions. June 2023, Querétaro Mexico. *Invited Talk*. Travel Award and Best Oral presentation
4. **Boston College Biology Department Retreat 2023.** Insulin Goes Viral: Understanding Viral Insulin potential in GIV infection model. Boston College Biology Department Retreat 2023- September 2023- Portsmouth, NH. Oral Presentation.
5. **American Society of Virology Meeting 2024.** Grouper Iridovirus viral insulin/IGF1 like peptide manipulates host insulin/IGF signaling. ASV - June 2024- Columbus, OH, USA. Oral Presentation

Khyati Girdhar, PhD (Postdoc)

6. **MIT Microbiome Symposium 2022.** A Gut Microbial Peptide and Molecular Mimicry in the Pathogenesis of Type 1 Diabetes. June, 2022, MIT, Cambridge, MA
7. **American Diabetes Association 2023.** A human gut commensal, *Parabacteroides distasonis*, stimulates an inflammatory response specific to the pancreas but not to the intestines and induces Type 1 diabetes in NOD mice. ADA, June, 2023, San Diego, CA, USA
8. **Boston College Biology Department Retreat 2022,** A Gut Microbial Peptide and Molecular Mimicry in the Pathogenesis of Type 1 Diabetes

Martina Chrudinova, PhD (Postdoc)

9. **American Diabetes Association 81st Scientific Sessions 2021.** Mandarin Fish Ranavirus Viral Insulin/IGF-like peptide Inhibits Human IGF-1 Receptor. June 25-29, (virtual).
10. **DZD Diabetes Research School 2020 (virtual),** Sept 29 – Oct 12 2020. Characterization of Viral Insulin-like Peptides Reveals Unique White Adipose Tissue Specific Characteristics
11. **The IGF and Insulin System: From Basic Science to Clinical Translation and New Technologies.** MFRV-VILP is an antagonist of the IGF-1 receptor. March 12-17, 2023. Ventura, CA, USA. Travel Award

Qian Huang, PhD (Postdoc)

12. **Boston Bacterial Meeting 2020.** A gut commensal, *Parabacteroides distasonis*, triggers Type 1 Diabetes autoimmunity. July 17, 2020. Virtual.

Dogus Dogru (PhD student)

13. **Gordon Research Seminar: IGF and Insulin System in Physiology and Disease 2023.** Evolution of Insulin, IGF-1, viral insulins and their cognate receptors interactions. GRS March 2023, Ventura, CA, USA. Travel Award
14. **Keystone Symposia AI in Biomedicine.** A machine learning-guided approach to uncover microbiome-derived autoantigen mimics in type 1 diabetes. May 1-3, 2024 (virtual)

Awards for the Altindis Lab Members

Aurelien Chuard, PhD

1. Best Oral Presentation Award, 7th biennial conference of the North American Society for Comparative Endocrinology, May 2023
2. Travel Award, American Society of Virology 2021, International
3. Travel Award. First Global Amphibian and Reptile Disease (GARD) conference-2022 (August 4-10, University of Tennessee Conference Center, Knoxville, TN)
4. The Boston College Postdoctoral Association (BCPDA) Conference Travel Award 2023
5. 2023-24 The Boston College Postdoctoral Association (BCPDA) Training Grants visiting Rochester University in 2023.

Khyati Girdhar, PhD

1. The Boston College Postdoctoral Association (BCPDA) Conference Travel Award 2023
2. The Boston College Postdoctoral Association (BCPDA) Conference Travel Award 2023

Martina Chrudinova, PhD

1. Travel Award and co-organizer. Gordon Research Seminar: The IGF and Insulin System: From Basic Science to Clinical Translation and New Technologies. March 10-12, 2023, Ventura, CA, USA

Audrey Randall, Graduate Student

1. Keystone Symposia Future of Science Fund scholarship. Mechanisms of Microbiota-Immune Interactions-Towards the Next Decade. Oct 8 - Oct 11, 2023, in Snowbird Resort in Snowbird, UT.
2. Best Poster Award. MIT Microbiome Symposium. March 22, 2024. Cambridge, MA.
3. American Association of Immunology Minority Scientist Travel Award. AAI-2024. May 3-7. Chicago, IL, 2024

Kristina Kelley, PhD Student

1. Travel Award from the Society for the Study of Celiac Disease to join The International Celiac Disease Symposium, Sheffield, UK, 5-7 September, 2024.

Katherine Truelson, PhD Student

1. Travel Award, SACNAS, National Diversity in STEM Meeting (Portland, Oregon), Oct 26-28 2022

Undergraduate Researchers' Awards

1. Yena Sung. Travel Award, SACNAS, National Diversity in STEM Meeting (San Juan, Puerto Rico), Oct 27-29 2022
2. Khadija Danazumi, Boston College, Jeffrey S. Keith Resilience Award, 2023
3. Kalaimagal Nesarajah, Advanced Study Grant 2023 & 2024 (\$2500/year, 2 years)
4. Michelle Zhang, Travel Award, SACNAS, National Diversity in STEM Meeting (Phoenix, AZ October 31-November 2, 2024)
5. Maria Jove, Travel Award, SACNAS, National Diversity in STEM Meeting (Phoenix, AZ October 31-November 2, 2024)
6. Kalaimagal Nesarajah, Travel Award, SACNAS, National Diversity in STEM Meeting (Phoenix, AZ October 31-November 2, 2024)

Contributed posters at BC (The Altindis Lab Members, EA*, corresponding author, selected 50)

Aurelien Chuard, PhD (Postdoc)

1. American Society of Virology Meeting 2022. Insulin Goes Viral: The Role of Viral Insulin/IGF-1 like peptides in host-virus interactions. ASV - July 2022- Madison, WI, USA Travel Award
2. Gordon Research Conference: IGF and Insulin System in Physiology and Disease 2023 Functional Characterization of Viral Insulin/IGF-1 like peptides in host-pathogen interactions. March 2023, CA, USA
3. MEEHUB2024- Microbial Ecology and Evolution Hub-based Conference 2024. Functional Characterization of Viral Insulin/IGF-1 like peptides in host-pathogen interactions. Boston, MA
4. ENDO 2024. Viral Hormones: The Role of Viral Insulin/IGF-1 like peptides in host-pathogen interactions. June 2024- Boston, MA, USA.

Khyati Girdhar, PhD (Postdoc)

5. nPOD meeting 2024. Deciphering the Mechanism of a Human Gut Commensal in the Acceleration of Type 1 Diabetes Pathogenesis. Long Beach, CA, Feb 9-12, 2024.
6. ENDO-2024. Investigating Viral Infections, Systemic Inflammation, and their Complex Interplay in Type 1 Diabetes Pathogenesis. Boston, MA, June 1-4, 2024
7. MIT Microbiome Symposium 2023. Pediatric Celiac Disease Progressors have a Distinct Gut Microbiome Composition, IgA response, and Plasma Metabolome profile. April, 2023, Cambridge, MA. MIT. April 7, 2023
8. The Immunology of Diabetes Society Conference 2021. A human gut commensal, *Parabacteroides distasonis*, enhances type 1 diabetes autoimmunity via molecular mimicry. Virtual. November 1-4, 2021.
9. Boston Bacterial Meeting-2022. Dynamics of Gut Microbiome, IgA Response and Plasma Metabolome in Development of Pediatric Celiac Disease. Boston, MA. Harvard University, Cambridge, MA. June 13-14, 2022
10. American Diabetes Association Scientific Sessions 2022. Identification of Sex-Specific Cytokine and Viral Infection Profiles in Type 1 Diabetes Patients. New Orleans, LA, USA. June 3-7, 2022.
11. Boston Bacterial Meeting-2021. Children Developing Celiac Disease Have a Distinct and Pro-inflammatory Gut Microbiota in the First 5 Years of Life. Harvard University, Cambridge, MA. June 10-11, 2021.
12. American Diabetes Association Scientific Sessions 2021. A Human Gut Commensal, *Parabacteroides Distasonis*, Enhances Type 1 Diabetes Autoimmunity via Molecular Mimicry. June 25–29, 2021 (virtual)

Martina Chrudinova, PhD (Postdoc)

13. Joslin International Symposium 2019. In vivo characterization of viral insulin-like peptides reveals higher potency on white adipose tissue. Boston, MA. Harvard Medical School. Oct 24-26 2019
14. 15th Annual Peptide Therapeutics Symposium. Characterization of viral insulin like peptides reveals unique white adipose tissue specific characteristics compared to human insulin. Oct 22-23 2020. virtual.
15. ENDO-2021. Characterization of viral insulin like peptides reveals unique white adipose tissue specific characteristics compared to human insulin. March 20 -23 2021 (virtual).

Kristina Kelley, (PhD student)

16. Boston College Biology Department Retreat. Dynamics of Gut Microbiome, Ig-A Response and Plasma Metabolome in Development of Pediatric Celiac Disease. August 22-23 2022, Portsmouth NH
17. Boston Bacterial Meeting. The Microbiota-derived Metabolite TDCA May Contribute to the Pathogenesis of Pediatric Celiac Disease. Harvard Science Center, Cambridge, MA. June 12- 13 2023
18. Dr. Samuel Nabrit Conference for Early Career Scholars. Investigating a Contributory Role of a Microbiota-derived Metabolite in the Pathogenesis of Celiac Disease. Brown University. June 8-9 2023. Providence, RI
19. Keystone Conference: Mechanisms of Microbiota-Immune Interactions-Towards the Next Decade. A Microbiota Derived Metabolite and Pediatric Celiac Disease Onset. October 8-11 2023, Snowbird resort, Snowbird Utah

20. MIT Microbiome Symposium, 2024. Exploring the Role of Taurodeoxycholic Acid in Pediatric Celiac Disease Pathophysiology March 22, 2024. MIT- Cambridge MA
21. AAI Annual Meeting, Immunology 2024. A microbiota derived metabolite and pediatric celiac disease pathogenesis May 3-7, 2024. Chicago IL
22. Boston Bacterial Meeting 2024. Investigating a Gut Microbiota-derived Metabolite in the Onset of Pediatric Celiac Disease June 3-4 2024. Cambridge, MA.

Audrey Randall (PhD student)

23. Dr. Samuel M. Nabrit Conference for Early Career Scholars. Determining if HPRT from *Parabacteroides distasonis* can accelerate diabetes onset by activating immune cells via molecular mimicry. Brown University, Providence, Rhode Island, June 8-9 2023
24. Boston Bacterial Meeting 2023. Determining if *Parabacteroides distasonis* requires HPRT to accelerate diabetes and activate insulin B:9-23-specific T-cells Harvard University, Cambridge, Massachusetts, June 12-13 2023
25. Boston College Biology Department Retreat. A gut commensal, *Parabacteroides distasonis*, and molecular mimicry in type 1 diabetes. Portsmouth, NH, August 21-22, 2023
26. Keystone Conference: Mechanisms of Microbiota-Immune Interactions-Towards the Next Decade. A gut commensal, *Parabacteroides distasonis*, and molecular mimicry in Type 1 diabetes. October 8-11 2023, Snowbird Resort, Snowbird, Utah. Travel Award.
27. MIT Microbiome Symposium 2024 A gut commensal, *Parabacteroides distasonis*, and molecular mimicry in Type 1 diabetes. March 22, 2024, Boston, MA. Best Poster Award
28. AAI Annual Meeting, Immunology 2024. A gut commensal, *Parabacteroides distasonis*, and molecular mimicry in Type 1 diabetes. May 3-7, 2024, Chicago, IL. 2024 AAI Minority Scientist Travel Award
29. ENDO 2024 (The Endocrine Society). A gut commensal, *Parabacteroides distasonis*, and molecular mimicry in Type 1 diabetes. June 1-4, 2024, Boston, MA

Dogus Dogru (PhD student)

30. Gordon Research Conference: IGF and Insulin System in Physiology and Disease 2023. Evolution of Insulin, IGF-1, viral insulins and their cognate receptors. March 2023, Ventura, CA
31. Dr. Samuel Nabrit Conference for Early Career Scholars. Evolution of Insulin, Insulin-like Growth Factor and Their Cognate Receptors in Vertebrates, Invertebrates and Viruses. June 2023, Brown University, Providence, RI
32. MIT Microbiome Symposium 2024. A Machine Learning-guided Approach to Uncover Microbiome-derived Autoantigen Mimics in Type 1 Diabetes. March 2024, MIT, Cambridge, MA

Katherine Truelson (PhD student)

33. Dr. Samuel M. Nabrit Conference for Early Career Scholars 2023. Determining the Viral Infection Profiles of Type 1 Diabetes Patients. June 8-9, 2023, Providence, RI
34. Boston Bacterial Meeting 2023. Viral Infections and Type 1 Diabetes. June 12-13, 2023, Boston, MA
35. SACNAS National Diversity in STEM (NDiSTEM) Conference. Determining the Viral Infection Profiles of Type 1 Diabetes Patients. October 24-29, 2023, Portland, OR
36. MIT Microbiome Symposium 2023. Determining the Viral Infection Profiles of Type 1 Diabetes Patients. April 7, 2023, Boston, MA

Undergraduate researchers (a selection)

37. Yena Sung and Amol Raisingani. BC Undergraduate Research Day. The Role of Gut Microbiome, IgA Response, and Plasma Metabolites on the Development of Pediatric Celiac's Disease. May 6, 2022, Chestnut Hill, MA
38. Matthew Mojares. BC Undergraduate Research Day. Evaluation of Viral Insulin-like Peptides Displayed Distinctive Attributes of White Adipose Tissue. May 6, 2022, Chestnut Hill, MA.
39. Kaitlin Reiners and Khadija Danazumi. BC Undergraduate Research Day. Viral Insulins: Unraveling of Their Functions in Host-Virus Interactions. May 6, 2022, Chestnut Hill, MA
40. Clarissa Howard Lukas Rhodes. Undergraduate Research Day. A human gut commensal, *Parabacteroides Distasonis*, accelerates Type 1 Diabetes (T1D) Pathogenesis. May 5, 2023 and May 3, 2024, Chestnut Hill, MA.

41. Nicole Koutun and Michelle Zhang. Undergraduate Research Day. The Role of a Gut Microbiome-derived Metabolite in the Pathogenesis of Pediatric Celiac Disease. May 5, 2024, Chestnut Hill, MA.
42. Kalaimagal Nesarajah. Undergraduate Research Symposium. Impact of Viral Insulin on IGF1R Localization in Zebrafish Cells. April 10, 2024, Chestnut Hill, MA
43. Kalaimagal Nesarajah SACNAS NDiSTEM Conference. Impact of Viral Insulin on IGF1R Localization in Zebrafish Cells. October 31, 2024.
44. Kalaimagal Nesarajah Dr. Samuel M. Nabrit Conference for Early Career Scholars. Understanding the Insulin and IGF1 Signaling Pathways During Physiological Nutrient Privation. June 2, 2023, Providence, RI
45. Michelle Zhang. Dr. Samuel M. Nabrit Conference for Early Career Scholars. Investigating the Role of Taurodeoxycholic Acid in the Pathogenesis of Pediatric Celiac Disease. June 7, 2024, Brown University, Providence, RI
46. Michelle Zhang. Future of Biology Conference. Exploring the Role of Taurodeoxycholic Acid in Pediatric Celiac Disease Pathophysiology. April 20, 2024, Harvard University, Cambridge, MA
47. Michelle Zhang. World Pre-Health Conference. The Microbiota-derived Metabolite TDCA May Contribute to the Pathogenesis of Pediatric Celiac Disease. April 13, 2024, Harvard Medical School, Boston, MA
48. Michelle Zhang. Undergraduate Research Day. Investigating the Role of Taurodeoxycholic Acid in the Pathogenesis of Pediatric Celiac Disease. May 3, 2024, Boston College
49. Brady James and Daniel Kim. BC Undergraduate Research Day. Isolation of Molecular Mimic HPRT for T1D Autoimmune Response. May 3, 2024, Chestnut Hill, MA.
50. Brady James. Dr. Samuel M. Nabrit Conference. Isolation of Molecular Mimic HPRT for T1D Autoimmune Response. June 7, 2024, Providence, RI

TEACHING

My teaching evaluations have consistently been above the departmental and university averages. Evaluations are available upon request.

Classes

2024 Fall

- BIOL4290 *Metabolic Regulation and Human Disease*
3 credit hour undergraduate class, 51 students
- BIOL5100 *Gut Microbiome and Human Disease*
2 credit hour undergraduate class, 12 students
- BIOL6420 *Contemporary Biological Questions and Critical Analysis* (co-taught, 3 weeks)
2 credit hour undergraduate class, 8 graduate students

2024 Spring

- BIOL4290 *Metabolic Regulation and Human Disease*
3 credit hour undergraduate class, 46 students
- BIOL5100 *Gut Microbiome and Human Disease*
2 credit hour undergraduate class, 12 students
- BIOL6420 *Contemporary Biological Questions and Critical Analysis* (co-taught, 3 weeks)
2 credit hour undergraduate class, 10 graduate students

2023 Spring

- BIOL4290 *Metabolic Regulation and Human Disease*
3 credit hour undergraduate class, 30 students
- BIOL5100 *Gut Microbiome and Human Disease*
2 credit hour undergraduate class, 12 students

2022 Spring

- BIOL4290 *Metabolic Regulation and Human Disease*
3 credit hour undergraduate class, 23 students
- BIOL5100 *Gut Microbiome and Human Disease*
2 credit hour undergraduate class, 12 students

2021 Spring

- BIOL4290 *Metabolic Regulation and Human Disease*
3 credit hour undergraduate class, 23 students
- BIOL5100 *Gut Microbiome and Human Disease*
2 credit hour undergraduate class, 12 students

2020 Spring

- BIOL4290 *Metabolic Regulation and Human Disease*
3 credit hour undergraduate class, 21 students
- BIOL5100 *Gut Microbiome and Human Disease*
2 credit hour undergraduate class, 12 students

2019 Spring

- BIOL5100 *Gut Microbiome and Human Disease*
2 credit hour undergraduate class, 12 students

Undergraduate Research Supervision in the Altindis Lab. Every semester 2019 Spring - 2024 Spring.
BIOL 4960. *Undergraduate Research* 3 credit hour supervision of undergraduate research; 46 students in total

MENTORING AND ADVISING

Underlined: current mentees

Senior Research Associate

1. Sudarshan Bhattacharjee, PhD 2024-present

Postdoctoral Researchers (Current: 3, Total: 6)

1. Khyati Girdhar 2020-present

Dr. Girdhar will start her laboratory as an Assistant Professor at the Medical College of Wisconsin in January 2025.

2. Aurelien Chuard 2021-present
3. Keiichiro Mine 2024-present
4. Mahya Razavi 2023-2024
5. Martina Chrudinova 2019-2022

Scientist, Institute of Organic Chemistry and Biochemistry, Prague, Czech Republic

6. Qian Huang 2018-2020

Assistant Professor at the University of Kentucky Medical School since July 20224.

7. Michael Rak 2018-2019
Principal Scientist, Carbon Biosciences, Boston, MA

Graduate Students (Current: 4, Total: 5)

1. Kristina Kelley 2022-present
2. Audrey Randall 2022-present
3. Dogus Dogru 2022-present
4. Katherine Truelson 2023- present
5. Oyku Tosun 2023-2024 (left the graduate program)

Rotation Graduate Students (Total: 18, 6-8 weeks)

1. Katherine Truelson 2023
2. Dogus Dogru 2022
3. Efe Cinar Sumer 2022
4. Kristina Kelley 2022
5. Audrey Randall 2022
6. Oyku Tosun 2022
7. Maira Ahmed 2021
8. Jelena Momirov 2021
9. Minqi Shen 2020
10. Irem Ozkan 2020
11. Tian Wang 2020
12. Casey Roberts 2020
13. Esteban Marte 2020
14. Tian Wang 2020
15. Matthew Crum 2019
16. M. Javad Akbari 2019
17. Alvaro Dafonte Imedio 2019
18. Bharathi Sundaresh 2019

In 2024, due to limited space constraints, The Altindis Lab was unable to accommodate rotation students, necessitating the regretful refusal of some applicants

Thesis Committees at Boston College

1. Kristina Kelley, Altindis Lab, PhD in progress (2023 -)
2. Audrey Randall, Altindis Lab, PhD in progress (2023 -)
3. Dogus Dogru, Altindis Lab, PhD in progress (2023 -)
4. Derek Lee, Seyfried Lab, Chair of the Committee, PhD in progress (2023 -)
5. Javad Akbari, Momeni Lab, Member of the Committee, PhD in progress (2022-)
6. Kevin White, Williams Lab, Chair of the Committee (received his MSc in 2024) (2019-2024)
7. Joshua Linnane, Johnson Lab, Member of the Committee (2019-)

Comprehensive Exam Committees, Boston College

1. Andrew Ding, Williams Lab (May 31, 2024)
2. Owen Page, Meyer Lab (May 17, 2023)
3. Courtney Stuart, Johnson Lab (May 3, 2023)
4. Justin McDuffie, Das Lab (December 15, 2022)
5. Ciara Bauwens, Gubbels Lab (May 11, 2022)
6. Vaishnavi Warriar, Momeni Lab (May 19, 2022)

7. Victoria Hogan, Johnson Lab (May 5, 2021)
8. Natalie Sandlin, Momeni Lab (May 1, 2020)
9. Suyen Espinoza Miranda, Van Opijnen Lab (May 15, 2019)

Undergraduate Research Students in the Altindis Lab (2019-2024)

Current Students (class)

- | | |
|--------------------------------|--|
| 1. Maria Jove (2027) | *SACNAS Travel Award |
| 2. Sofia Pansini (2026) | |
| 3. Lukas Rhodes (2026) | |
| 4. Nicole Koutun (2025) | *Gateway Student |
| 5. Keith Mutunga (2025) | *Gateway Student |
| 6. Brady James (2025) | |
| 7. Michelle Zhang (2025) | *Gateway Student, SACNAS Travel Award |
| 8. Clarissa Howard (2025) - | *Gateway Student |
| 9. Kalaimagal Nesarajah (2025) | *Thesis, Advanced Study Grant 2023&2024, SACNAS Travel Award |
| 10. Trishna Condoor (2027) | |
| 11. Catherine Vu (2027) | *Gateway Student |

* The BC Gateway Program is designed to provide academic support, mentorship, and career development opportunities specifically for BIPOC and first-generation students transitioning to Boston College.

Alumni (Class and Current position)

Medical School Students(class)

1. Yasmine Nousari (2021)
Medical Student (MD-MPH, M2), *Miami University of Miami's Miller School of Medicine*
2. Amaya Powis (2021) * BC Gateway Student
Medical Student (M1), *Rutgers Robert Wood Johnson Medical School*
3. Aparna Naik (2021) * BC REU Program
Medical Student (M2), *Noorda College of Osteopathic Medicine*
4. David Kim (2021)
Medical Student (M0, accepted) at *Touro University College of Osteopathic Medicine*
5. Nathan Ji (2022)
Medical Student at *UMass School of Medicine, Worcester, MA*
6. Kaitlin Reiners (2023)
Medical School Student (M0, accepted) *Tufts School of Medicine, Boston, MA*
7. Kaan Sevgi (2022) * BC Montserrat Program
Medical Student (M2), *Kansas City University's College of Osteopathic Medicine*
8. Khadija Danazumi (2023) * BC Gateway Student, McNair Scholar
MD/PhD student (M0, accepted), *University of Connecticut, Medical School*

Graduate School Students (class)

1. Ruixu Huang (2022)
PhD student, *Dartmouth College, Goods Lab, Engineering Department*
2. Typhania Zanou (2023) * BC Gateway Student, McNair Scholar
Master of Public Health Epidemiology Student (2nd year), *University at Albany*
3. Claudia Brady (2020)
Master of Public Health (2022-2024), *The George Washington University, Milken Institute School of Public Health. Works as legislative Correspondent United States Senate.*

Other Positions (class)

1. Scott Hsu (2021) – applying to PA School
Medical Assistant, New York
2. Maximilian Figura (2022) – applying to Medical School
Emergency Medical Technician in Queens, New York
3. Amol Raisingani (2022) – applying to Medical School
Research Assistant, Tisch MS Research Center of New York
4. Matthew Mojares (2023) – applying to Medical School
Medical Assistant, New York
5. Yena Sung (2023) – applying to graduate school
Research Assistant, MIT Biology Department
6. Tu Tran (2021)
Project Manager at Deloitte
7. Robert Reiners (2021)
Advanced Emergency Medical Technician, Jackson Ambulance Service
8. Riley Aquilano (2022)
Unknown
9. Brianna Coppinger (2023)
Unknown
10. Jaewon Oh (2023)
Unknown
12. Julianne Cutone (2024)
Vertex Pharmaceuticals
13. Genesis Soto (2024) *Gateway Student, McNair Scholar
Clinical Research Technician
14. Alessandro Pezzella (2024) *Gateway Student – applying to Medical School
Clinical Research Technician

McNair Exploratory Program mentees (Total: 2)

1. Joseph Barawisata 2023
2. Mahad Abdi 2019

Note: Since September 2018, I've had 36 undergraduate researchers in my laboratory. I have actively recruited 26 Black, Indigenous, and people of color (BIPOC) and/or first-generation undergraduate researchers into our lab, reflecting our commitment to inclusivity. Most of these students are recruited in active collaboration with Gateway and McNair scholar programs. Several undergraduate students have made substantial contributions to our research, earning them co-authorship credits in our publications.

PROFESSIONAL SERVICE

Biology Department Committees

- | | |
|--------------|---|
| 2019-present | Member of the Biology Graduate Admissions Committee |
| 2020-2023 | Inaugural member of the Biology DEI Committee |
| 2021-2023 | Chair of the Biology Graduate Admissions Committee |

Boston College Committees

2023-present Chair of Boston College Radiation Safety Committee (RSC)
2024-present Faculty Advisor for Partners in Health Club
2023-present Faculty Advisor for Diabetes Link Club
2024 Faculty Representing the Biology Department, Boston College Admitted Eagle Day
2019-2023 Member of Institutional Animal Care and Use Committee (IACUC)
2019-2023 BC Graduate Academic Integrity Committee

External Grant Review

International Grant Review

2020 Czech Science Foundation, Peer Review Committee
2024 Diabetes UK, Peer Review Committee

USA Federal Grant Review

2023 **NIH**, NIDCR Special Study Section, ad hoc member, (06/15/2023)
2022 **NIH**, the Hypersensitivity, Autoimmune, and Immune-mediated [HAI] Diseases Study Section
202210, ad hoc member (06/16/2022)

Foundation Research Awards Grant Review

2021-2023 The Mathers Foundation, Peer Review Committee
2020 The Juvenile Diabetes Research Foundation, Peer Review Committee

Research Center Grant Review

2024- Joslin's Diabetes Research Center (Harvard Medical School) Pilot and Feasibility Program

Manuscript Peer Review (selected):

Cell Metabolism, Nature Chemical Biology, Cell Reports, mSystems, Gut Microbes, FASEB Journal, Microbiology Spectrum, Cellular and Molecular Life Sciences

Journal Editing

Topic Editor for special issue on Vaccinology in 21st century for Current Topics in Medicinal Chemistry. Bentham Sciences, October 2013

Book

1. Ozyurek E, **Altindis E**, Ozpinar G. Authoritarianism and Resistance in Turkey: Conversations on Democratic and Social Challenges 1st ed. 2019. **Springer**. (22 citations by 06/24).

AWARDS

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1. Travel Award. Imaging the Pancreas in Diabetes, and Benign and Malignant Exocrine Pancreatic Disease. NIH, NIDDK. Jan. 13-14, 2020. Bethesda, MD.
 2. Travel Award. 54th EASD Annual Meeting 2018, Berlin, Germany.
 3. ADA Best Presidential Abstract, Travel Award. 77th American Diabetes Association Scientific Sessions, , June 2018, Orlando, FL (co-first authored with Bruna B. Brandao)
 4. Best Paper-2018 (May 2017-May 2018). Marble Dinner, Joslin Diabetes Center, May 2018, Boston, MA (selected based on the votes of all Joslin researchers)
 5. Joslin Diabetes Center, Best Questions at Joslin Seminars, January 2018, Boston, MA
 6. Travel Award. Joslin Fellows Council, , 2017, Boston, MA.

7. Registration/ Accommodation Award German Diabetes School and Insulin Receptor Conference 2017, 2017, Nice, France.
8. Travel Award. International Congress of Immunogenomics and Immunomics Conference, 2006. Budapest, Hungary.

FACULTY DEVELOPMENT ACTIVITIES ATTENDED

1. **LEAD-in3**: A four-month virtual course to develop integrated, intentional, and inclusive research leaders in the Academy. September-December 2024. AtKisson Training Group
2. The American Association of Immunologists. **Advanced Immunology course** (6 full days, online), November-December 2023.
3. **CIMER Mentoring Workshop**. March 7, 2023 (full day)
4. NIH Virtual Seminar on **Program Funding and Grants Administration**. November 11-21, 2021.
5. **The Lowell Humanities Series**. Boston College (since 2019).
6. **How to Write a Winning NSF CAREER Proposal workshop**. Virtual. Organized by University of Massachusetts, Amherst. May 2021
7. **Successful Grant Writing Strategies**. Virtual. Organized by Harvard Medical School. Fall 2019.
8. **Scientific Writing Retreat**. Cold Spring Harbor Laboratory. November 13 - 17, 2019
9. **NIDDK K-Awardees' Workshop 2019**, Bethesda, MD, April 11 - 12, 2019
10. **Leadership Strategies for the Researcher** (Harvard Catalyst Education Program, October 18/19, 2018)
11. **Teaching 101: Bringing Effective Teaching Practices to your Classroom** (Harvard Medical School, GENETIC 302QC), February-May 2018
12. **Leadership and Management Skills Training**. Harvard Medical School, Office for Postdoctoral Fellows, 2017, 8 hours. Boston, MA, USA
13. **Strategies and Techniques for Analyzing Microbial Population Structure**, Marine Biological Laboratory, August 5 - August 15, 2015 (*72 hours*), Woods Hole, MA, USA
14. **Vaccinology Course**, Institute Pasteur, 5 weeks (170 hours), Paris, France

RESEARCH HIGHLIGHTS (selected)

1. **WGBH, NPR. All Things Considered**. Viral Insulins: ~ 10 minutes interview by Arun Rath. Aired twice, March 4, **2024**.
2. Dan Robitzski. How a Specific Gut Bacterium May Cause Type 1 Diabetes. **The Scientist**. Aug 25, **2022**
3. Laugesen et al. Unconventional insulins from predators and pathogens. **Nature Chemical Biology** volume 18, p 688–697 **2022**
4. **Ask the Expert Podcast. Pancreas and Gut Microbiome**. May 24, **2022**
5. Kelly, P. N. Impersonating insulin. **Science** 377, 1505-1506, **2022**
6. Elizabeth Svoboda. Gut feeling yields evidence of microbial involvement in autoimmunity. **Nature**, volume 595. July **2021**.
7. **The Sugar Science Podcast**. Episode 43. Emrah Altindis, PhD, Assistant Professor, Boston College. December 14, **2020**
8. **This Week in Virology (TWIV) Podcast**. Episode 485. March 18, **2018**
9. Louis J. Cohen. Don't forget about me! Viral-host metabolic interactions in the microbiome. **Science Translational Medicine**. Vol 10, Issue 433. March 19, **2018**
10. Ashley York. Viral hormones activate human insulin signaling. **Nature Reviews Microbiology** Vol16, p261 (2018)

OUTREACH

2023 - State of the Science: The Role of the Microbiome and Type 1 Diabetes. *the(sugar)science*. 01/11/2023

2023- Science Journal for Kids. How do viruses trick their hosts into feeding them? October 2023

2023 - FACES Summit: Racism in the Workplace Professor Panel. 04/22/2023

2022 - Joslin Diabetes Center Alumni Career Panel, October 7, 2022

2021 - Guest scientist: Bioethics Society Lunch with a Professor, Boston College

2021 - Boston Bacterial Meeting 2021 – Breakout Session on Diversity in STEM, Chair.

2020 - McNair Exploratory Program, mentor for first year underrepresented students

2019 - A Symposium on Careers and Collaboration in Science, Boston Postdoctoral Association Speaker at the "New hires" panel.

2019 - Mentoring and training four Gateway students in my laboratory

2019 - Mentoring and training two Montserrat students in my laboratory

2021 - Mentoring and training two McNair scholars in my laboratory

Faculty Advisor for Student Clubs at BC

2023- Partners in Health: Boston College chapter

2024- Diabetes Link: Boston College chapter

PROFESSIONAL MEMBERSHIP

2024- American Endocrine Society

2023- The American Association of Immunologists

2018-2023 American Diabetes Association

2018-2019 European Association for the Study of Diabetes

2019-2022 American Society of Virology

MEDIA CONTRIBUTIONS (selected)

1. The Coronavirus Meets Authoritarianism in Turkey. <https://www.newyorker.com/news/q-and-a/the-coronavirus-meets-authoritarianism-in-turkey> **New Yorker**, April 3, 2020 (full page interview)
2. Turkey Struggles During Pandemic To Protect Public Economy. <https://www.npr.org/2021/01/26/960631412/turkey-struggles-during-pandemic-to-protect-public-health-economy> **NPR**. January 26, 2021 (interview). <https://vimeo.com/404527336>
3. Turkeys Coronavirus Lockdown. **BCC News**. April 6, 2020 (interview)
4. Erdogan under pressure as Turkey's coronavirus toll **Financial Times**. March 31, 2020 (interview) <https://www.ft.com/content/b0a9de7b-f618-45f4-a352-d658ce554cf3>
5. Türkei: Der unerhörte Experte. <https://www.zeit.de/2020/23/tuerkei-coronavirus-virologe-emrah-altindis-usa> (**Die Zeit**, one of the Germany's leading and most respected weekly newspapers) May 27, 2020.

Boston College News and Updates

1. Game-changing' research on cancer. BC News Update August 5, 2024.
2. BC scientist Emrah Altindis receives \$2.5 million NIH grant. <https://www.bc.edu/bc-web/sites/bc-news/articles/2024/spring/bc-scientist-emrah-altindis-receives-nih-grant.html>

3. New grant for diabetes research. <https://www.bc.edu/bc-web/sites/bc-news/articles/2023/summer/beatson-foundation-grant-for-diabetes-research.html> August 2023.
4. Support for earthquake relief efforts. <https://www.bc.edu/bc-web/bcnews/campus-community/around-campus/earthquake-relief.html>. February 2023
5. What causes type 1 diabetes? <https://www.bc.edu/bc-web/bcnews/science-tech-and-health/biology-and-genetics/new-insights-into-type-1-diabetes.html>. September 2022
6. "Novel and exciting" findings for diabetes treatment. <https://www.bc.edu/bc-web/bcnews/science-tech-and-health/biology-and-genetics/gut-microbes-and-diabetes.html>. May 2022
7. Grant for biologist's diabetes research. <https://www.bc.edu/bc-web/bcnews/science-tech-and-health/biology-and-genetics/boston-college-biologist-emrah-altindis-awarded-grant-from-jdrf.html>. February 2022
8. Understanding pediatric celiac disease. <https://www.bc.edu/bc-web/bcnews/science-tech-and-health/biology-and-genetics/mathers-foundation-grant.html>. November 2020
9. Research grants for two Boston College scientists. <https://www.bc.edu/bc-web/bcnews/campus-community/faculty/awards-for-bc-scientists.html> February 2020