

**Rugivan Sabaratnam, MSc, PhD**  
Postdoctoral Researcher  
University of Southern Denmark & Steno Diabetes Center Odense  
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## Employment

### Research outputs

#### **White adipose tissue mitochondrial bioenergetics in metabolic diseases**

Sabaratnam, R., Hansen, D. R. & Svehningsen, P., Dec 2023, In: Reviews in Endocrine and Metabolic Disorders. 24, 6, p. 1121-1133

#### **Acute exercise simultaneously increases GDF15 and unfolded protein response/integrated stress response signalling in skeletal muscle in obesity and type 2 diabetes**

Sabaratnam, R., 5. Oct 2023.

#### **Iron, glucose and fat metabolism and obesity: an intertwined relationship**

Hilton, C., Sabaratnam, R., Drakesmith, H. & Karpe, F., Jul 2023, In: International Journal of Obesity. 47, 7, p. 554-563

#### **TCF7L2 plays a complex role in human adipose progenitor biology, which might contribute to genetic susceptibility to type 2 diabetes**

Verma, M., Loh, N. Y., Sabaratnam, R., Vasani, S. K., van Dam, A. D., Todorčević, M., Neville, M. J., Toledo, E., Karpe, F. & Christodoulides, C., Aug 2022, In: Metabolism: Clinical and Experimental. 133, 14 p., 155240.

#### **HOTAIR interacts with PRC2 complex regulating the regional preadipocyte transcriptome and human fat distribution**

Kuo, F. C., Neville, M. J., Sabaratnam, R., Wesolowska-Andersen, A., Phillips, D., Wittemans, L. B. L., van Dam, A. D., Loh, N. Y., Todorčević, M., Denton, N., Kentistou, K. A., Joshi, P. K., Christodoulides, C., Langenberg, C., Collas, P., Karpe, F. & Pinnick, K. E., 26. Jul 2022, In: Cell Reports. 40, 4, 23 p., 111136.

#### **A Signature of Exaggerated Adipose Tissue Dysfunction in Type 2 Diabetes Is Linked to Low Plasma Adiponectin and Increased Transcriptional Activation of Proteasomal Degradation in Muscle**

Sabaratnam, R., Skov, V., Paulsen, S. K., Juhl, S., Kruse, R., Hansen, T., Halkier, C., Kristensen, J. M., Vind, B. F., Richelsen, B., Knudsen, S., Dahlgaard, J., Beck-Nielsen, H., Kruse, T. A. & Højlund, K., 1. Jul 2022, In: Cells. 11, 13, 18 p., 2005.

#### **Factors Mediating Exercise-induced Organ Crosstalk**

Sabaratnam, R., Wojtaszewski, J. F. P. & Højlund, K., Feb 2022, In: Acta Physiologica. 234, 2, e13766.

#### **Adipocyte-Endothelium Crosstalk in Obesity**

Sabaratnam, R. & Svehningsen, P., 12. Aug 2021, In: Frontiers in Endocrinology. 12, 10 p., 681290.

#### **Effect of long-term testosterone therapy on molecular regulators of skeletal muscle mass and fibre-type distribution in aging men with subnormal testosterone**

Kruse, R., Petersson, S. J., Christensen, L. L., Kristensen, J. M., Sabaratnam, R., Ørtenblad, N., Andersen, M. & Højlund, K., Nov 2020, In: Metabolism: Clinical and Experimental. 112, p. 154347-154347.

#### **Next generation diabetes scientists shape global research culture: A reflective proposal from postdoctoral researchers in diabetes research**

Broadley, M. M., Gonzalez-Franquesa, A., Jonsson, A., Christiansen, C. B., Carrasquilla, G. D., Mamidi, A., Ghiasi, S. M., Juel, H. B., Falk, S., Isidor, M. S., Aldiss, P., Gillberg, L., Santos, K. C. D., Sabaratnam, R., Huang, L. O., Quist, J. S., Knudsen, J. R., Poulsen, S., Quaranta, R., Tozzi, M., & 30 others Mikkelsen, R. B., Andersen, M. K., Dall, M., Møller, A. B., Drag, M. H., Panahi, S., Lyons, C. L., Small, L., Altıntaş, A., Poursharifi, P., Osborne, B., Sarvari, A. K., Johnston, L. W.,

Solheim, M. H., Modvig, I. M., Husted, A. S., Jespersen, N. Z., Brown, E. L., Bak, E., Peluso, A., Finger, F., Grunddal, K. V., Rupar, K., Vistisen, H. T., Henningsen, J. B., Ma, T., Pedersen, M. H., Plucinska, K., Jepsen, S. L. & Repasky, G., Jun 2020, In: Acta Physiologica. 229, 2

**Urinary extracellular vesicles: Origin, role as intercellular messengers and biomarkers; efficient sorting and potential treatment options**

Svenningsen, P., Sabaratnam, R. & Jensen, B. L., Jan 2020, In: Acta Physiologica. 228, 1, 14 p., e13346.

**Acute exercise increases plasma levels of muscle-derived microvesicles carrying fatty acid transport proteins**

Nielsen, M. H., Sabaratnam, R., Pedersen, A. J. T., Højlund, K. & Handberg, A., 1. Oct 2019, In: The Journal of clinical endocrinology and metabolism. 104, 10, p. 4804-4814

**Exercise induction of key transcriptional regulators of metabolic adaptation in muscle is preserved in type 2 diabetes**

Sabaratnam, R., Pedersen, A. J., Eskildsen, T. V., Kristensen, J. M., Wojtaszewski, J. F. P. & Højlund, K., 1. Oct 2019, In: The Journal of clinical endocrinology and metabolism. 104, 10, p. 4909-4920

**In human nephrectomy specimens, the kidney level of tubular transport proteins does not correlate with their abundance in urinary extracellular vesicles**

Sabaratnam, R., Geertsen, L., Skjødt, K., Højlund, K., Dimke, H., Lund, L. & Svenningsen, P., 1. Sept 2019, In: American Journal of Physiology: Renal Physiology. 317, 3, p. F560-F571

**Intact regulation of muscle expression and circulating levels of myokines in response to exercise in patients with type 2 diabetes**

Sabaratnam, R., Pedersen, A. J. T., Kristensen, J. M., Handberg, A., Wojtaszewski, J. F. P. & Højlund, K., 1. Jun 2018, In: Physiological Reports. 6, 12, 12 p., e13723.

**Transcriptional Signatures of Adipose Tissue and Skeletal Muscle and Effect of Acute Exercise on Key Molecular Regulators of Muscle Metabolism in Type 2 Diabetes**

Sabaratnam, R., 16. Mar 2018

**The prevalent deep intronic c. 639+919 G>A GLA mutation causes pseudoexon activation and Fabry disease by abolishing the binding of hnRNPA1 and hnRNP A2/B1 to a splicing silencer**

Palhais, B., Dembic, M., Sabaratnam, R., Nielsen, K. S., Doktor, T. K., Bruun, G. H. & Andresen, B. S., 27. Aug 2016, In: Molecular Genetics and Metabolism. 119, 3, p. 258-269

**Intact Regulation of the AMPK Signaling Network in Response to Exercise and Insulin in Skeletal Muscle of Male Patients With Type 2 Diabetes: Illumination of AMPK Activation in Recovery From Exercise**

Kjøbsted, R., Pedersen, A. J. T., Hingst, J. R., Sabaratnam, R., Birk, J. B., Kristensen, J. M., Højlund, K. & Wojtaszewski, J. F. P., May 2016, In: Diabetes. 65, 5, p. 1219-1230

**Splice-shifting oligonucleotide (SSO) mediated blocking of an exonic splicing enhancer (ESE) created by the prevalent c.903+469T>C MTRR mutation corrects splicing and restores enzyme activity in patient cells**

Palhais, B., Præstegaard, V., Sabaratnam, R., Doktor, T. K., Lutz, S., Burda, P., Suormala, T., Baumgartner, M., Fowler, B., Bruun, G. H., Andersen, H. S., Kozich, V. & Andresen, B. S., 2015, In: Nucleic Acids Research. 43, 9, p. 4627-4639

**The ETFDH c.158A>G Variation Disrupts the Balanced Interplay of ESE- and ESS-Binding Proteins thereby Causing Missplicing and Multiple Acyl-CoA Dehydrogenation Deficiency**

Olsen, R. K. J., Brøner, S., Sabaratnam, R., Doktor, T. K., Andersen, H. S., Bruun, G. H., Gahrn, B., Stenbroen, V., Olpin, S. E., Dobbie, A., Gregersen, N. & Andresen, B. S., 2014, In: Human Mutation. 35, 1, p. 86-95

## Activities

### University of Oxford

Rugivan Sabaratnam (Visiting researcher)

1. Feb 2020 → 1. Feb 2023

Activity: Visiting another research institution

### **FIDELIO - Webinar**

Rugivan Sabaratnam (Guest lecturer)

18. Jun 2020

Activity: Talks and presentations › Talks and presentations in private or public companies

### **DDA Winter School for Postdocs 2019**

Rugivan Sabaratnam (Organizer)

3. Nov 2019 → 8. Nov 2019

Activity: Attending an event › Conference organisation or participation

### **Intact muscle insulin signalling in patients with a gain-of-function LRP5 mutation despite decreased insulin sensitivity**

Rugivan Sabaratnam (Guest lecturer)

7. Jun 2019 → 11. Jun 2019

Activity: Talks and presentations › Conference presentations

### **University of Oxford**

Rugivan Sabaratnam (Visiting researcher)

27. Feb 2017 → 31. May 2017

Activity: Visiting another research institution

### **Effect of acute exercise on expression and circulating levels of myokines in patients with type 2 diabetes**

Rugivan Sabaratnam (Other)

2017 → ...

Activity: Talks and presentations › Conference presentations

### **Profiling of changes in muscle miRNA in response to acute exercise in type 2 diabetes**

Rugivan Sabaratnam (Speaker)

2017 → ...

Activity: Talks and presentations › Conference presentations

### **Transcriptional regulators of metabolic adaptation in muscle are robustly induced by acute exercise in type 2 diabetes**

Rugivan Sabaratnam (Speaker)

10. Jun 2016

Activity: Talks and presentations › Conference presentations

### **Transcriptional regulators of metabolic adaptation in muscle are robustly induced by acute exercise in type 2 diabetics**

Rugivan Sabaratnam (Speaker)

2015

Activity: Talks and presentations › Conference presentations

### **Transcriptional regulators of metabolic adaptation in muscle are robustly induced by acute exercise in type 2 diabetics. No evidence of exercise resistance.**

Rugivan Sabaratnam (Speaker)

2015 → ...

Activity: Talks and presentations › Conference presentations

## **Teaching and supervision**

### **BSc. student**

Rugivan Sabaratnam

01/09/2015 → 01/02/2016

### **BSc. student**

Rugivan Sabaratnam  
01/02/2015 → 01/07/2015

**Masters student**

Rugivan Sabaratnam  
01/08/2019 → 30/06/2020

**MSc. student**

Rugivan Sabaratnam  
01/08/2016 → 01/08/2017

**MSc. student**

Rugivan Sabaratnam  
01/02/2015 → 01/07/2015

**SU503 - Pharmacology**

Rugivan Sabaratnam  
01/01/2015 → 01/07/2018

**SU518: Physiology and pharmacology for pharmaceuts – Module 3: Respiration, GI-system, and Immunology**

Rugivan Sabaratnam  
01/10/2016 → 31/12/2016

**SU803 - Pharmacology B**

Rugivan Sabaratnam  
01/10/2018 → 31/12/2018

**Press/Media**

**He wanted to put himself to the test in an international setting**

Rugivan Sabaratnam  
06/05/2021  
1 item of Media coverage