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Lektor  
Institut for Biomedicin - Forskning og uddannelse, Skou-bygningen  
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## Ansættelse

### Lektor

Institut for Biomedicin - Forskning og uddannelse, Skou-bygningen  
Aarhus Universitet  
Aarhus C, Danmark  
1 mar. 2024 → present

### affiliate scientist

Stanford University  
Menlo Park, USA  
1 aug. 2021 → present

## Kvalifikationer

Stem cell biology, Postdoctorate, Post-transcriptional regulation of muscle stem cell quiescence, Stanford University  
1 feb. 2011 → 31 jan. 2018

Dimissionsdato: 31 jan. 2018

Human Genetics, PhD, Functional protein networks unifying limb girdle muscular dystrophy, Leiden University  
1 nov. 2005 → 31 jan. 2011

Dimissionsdato: 12 jan. 2011

Biomolecular Sciences, MSc, Utrecht University

1 sep. 2003 → 31 aug. 2005

Dimissionsdato: 27 jun. 2005

Biomedical Sciences, BSc, Utrecht University

1 sep. 2000 → 31 aug. 2003

## Priser

### Science Magazine Essay Competition

de Morree, A. (Modtager), 5 jul. 2013

### Stanford SURPAS Outstanding Advocate Award

de Morree, A. (Modtager), 16 dec. 2016

## Bevillinger

### Towards FSHD Therapeutics: Understanding Polyadenylation Site Choice

de Morree, A. (PI)

Muscular Dystrophy Association: 1.300.000,00 kr.

01/08/2015 → 31/07/2018

## Aktiviteter

### Limiting fatty infiltration in skeletal muscle

de Morree, A. (Foredragsholder)

7 nov. 2023

**Prøve i Dansk 3**

de Morree, A. (Deltager)  
15 jun. 2023

**Stressful environments and how to navigate them, Part 2**

de Morree, A. (Foredragsholder)  
26 maj 2023

**Stressful environments and how to navigate them**

de Morree, A. (Foredragsholder)  
23 maj 2023

**Using animal models to study Stem Cell Quiescence**

de Morree, A. (Foredragsholder)  
19 apr. 2023

**Regulation of Stem Cell Quiescence in the Maintenance of Tissue Integrity**

de Morree, A. (Foredragsholder)  
11 apr. 2023

**PhD thesis opposition**

de Morree, A. (Eksaminator)  
27 jan. 2023

**Regulation of stem cell quiescence in the maintenance of tissue integrity (ingelesez)**

de Morree, A. (Foredragsholder)  
26 jan. 2023

**Regulation of stem cell quiescence in the maintenance of tissue integrity**

de Morree, A. (Foredragsholder)  
19 jan. 2023

**Cell Cycle (Tidsskrift)**

de Morree, A. (Fagfællebedømmer)  
2023 → ...

**Life Sciences (Tidsskrift)**

de Morree, A. (Fagfællebedømmer)  
2023 → ...

**Signal Transduction and Targeted Therapy (Tidsskrift)**

de Morree, A. (Fagfællebedømmer)  
2023 → ...

**Danish Diabetes Academy Postdoc Summit**

de Morree, A. (Foredragsholder)  
25 sep. 2022

**Consultant on muscle biology research**

de Morree, A. (Konsulent)  
12 sep. 2022 → 11 sep. 2023

**Aarhus University Pedagogical Program**

de Morree, A. (Deltager)

24 aug. 2022 → 14 dec. 2022

**Invited presentation**

de Morree, A. (Foredragsholder)

2 aug. 2022

**The Skeletal Muscle Stem Cells and Regeneration Conference**

de Morree, A. (Foredragsholder)

28 jul. 2022

**Neuroscience Theme Day**

de Morree, A. (Foredragsholder)

18 maj 2022

**Affiliate scientist**

de Morree, A. (Deltager)

1 aug. 2021 → ...

**Consultant on FSHD research**

de Morree, A. (Konsulent)

22 apr. 2021 → 31 dec. 2022

**Certificate program in Applied Compassion Training**

de Morree, A. (Deltager)

1 jan. 2020 → 15 nov. 2020

**Supervisory Academy certificate program**

de Morree, A. (Deltager)

7 sep. 2018 → 8 aug. 2019

**Bio-protocol (Tidsskrift)**

de Morree, A. (Redaktør)

3 feb. 2015 → 1 jul. 2025

**Bio-protocol (Tidsskrift)**

de Morree, A. (Redaktionsmedlem)

2015 → ...

**the reproducibility initiative: cancer biology (Ekstern organisation)**

de Morree, A. (Medlem)

24 jan. 2014 → 9 dec. 2021

**FASEB journal : official publication of the Federation of American Societies for Experimental Biology (Tidsskrift)**

de Morree, A. (Fagfællebedømmer)

2014 → ...

**Grant reviewer for Italian Ministry of Health**

de Morree, A. (Deltager)

12 jun. 2013 → ...

**Human Molecular Genetics (Tidsskrift)**

de Morree, A. (Fagfællebedømmer)

2011 → ...

## **European Journal of Human Genetics (Tidsskrift)**

de Morree, A. (Fagfællebedømmer)

1 jan. 2010 → ...

## **Presse/medie**

### **Cell atlas will make it possible to transplant more types of organs in the future**

de Morree, A.

07/06/2022

1 element af Mediedækning

### **EMPLOYEES' MENTAL HEALTH SHOULD BE PRIORITISED (EVEN) MORE**

de Morree, A.

17/09/2021

1 element af Mediedækning

### **Et skridt tættere på et komplet atlas over menneskekroppen**

de Morree, A.

14/06/2022

1 element af Mediedækning

### **Five Questions with FSHD Researcher Antoine de Morrée**

de Morree, A.

14/10/2015

1 element af Mediedækning

### **Frank fra museet fikser brækket dinosaur-knogle**

de Morree, A.

13/01/2023

1 element af Mediedækning

### **Neuroscience Theme Meeting**

de Morree, A.

18/05/2022

1 element af Mediedækning

### **Old stem cells can be rejuvenated with young blood**

de Morree, A.

17/03/2022

1 element af Mediedækning

## **Projekter**

### **Differentiation potential of mesenchymal stem cells**

de Morree, A. (PI)

### **How stem cells control the quiescent state, including entry, maintenance, and exit**

de Morree, A. (PI)

### **Post-transcriptional control of gene expression**

de Morree, A. (PI)

**Stem cell therapeutics in muscular dystrophy**  
de Morree, A. (PI)

## **Undervisning og Vejledning**

**AU Bio-technology Masters Program**

de Morree, A.  
26/09/2023 → 26/09/2023

**Bachelor thesis projects in biochemistry - written**

de Morree, A.  
01/09/2021 → 31/07/2024

**Bachelor thesis projects - practical**

de Morree, A.  
01/09/2022 → 31/07/2025

**Building Resilience Workshop**

de Morree, A.  
06/12/2021 → 06/12/2021

**Building Resilience Workshop**

de Morree, A.  
08/12/2021 → 08/12/2021

**Molekylære principper for celle- og organfunktioner**

de Morree, A.  
01/03/2022 → 01/10/2027

## **Publikationer**

**Absolute Quantification of mRNA Isoforms in Adult Stem Cells Using Microfluidic Digital PCR**

Das Barman, S., Frimand, Z. & de Morree, A., sep. 2023, I: *Bio-protocol*. 13, 17, e4811.

**Regulation of adult stem cell function by ketone bodies**

Andersen, O. E., Poulsen, J. V., Farup, J. & de Morree, A., aug. 2023, I: *Frontiers in Cell and Developmental Biology*. 11, 9 s., 1246998.

**Regulation of adult stem cell quiescence and its functions in the maintenance of tissue integrity**

de Morree, A. & Rando, T. A., maj 2023, I: *Nature Reviews. Molecular Cell Biology*. 24, 5, s. 334-354 21 s.

**Multiomics reveals glutathione metabolism as a driver of bimodality during stem cell aging**

Benjamin, D. I., Brett, J. O., Both, P., Benjamin, J. S., Ishak, H. L., Kang, J., Kim, S., Chung, M., Arjona, M., Nutter, C. W., Tan, J. H., Krishnan, A. K., Dulay, H., Louie, S. M., de Morree, A., Nomura, D. K. & Rando, T. A., 7 mar. 2023, I: *Cell Metabolism*. 35, 3, s. 472-486.e6

**Elevated CD47 is a hallmark of dysfunctional aged muscle stem cells that can be targeted to augment regeneration**

Porpiglia, E., Mai, T., Kraft, P., Holbrook, C. A., de Morree, A., Gonzalez, V. D., Hilgendorf, K. I., Frésard, L., Trejo, A., Bhimaraju, S., Jackson, P. K., Fantl, W. J. & Blau, H. M., 1 dec. 2022, I: *Cell Stem Cell*. 29, 12, s. 1653-1668.e8 16 s.

### **Isolation of Quiescent Stem Cell Populations from Individual Skeletal Muscles**

Frimand, Z., Das Barman, S., Kjær, T. R., Porgiglia, E. & de Morree, A., dec. 2022, I: Journal of Visualized Experiments. 190, e64557.

### **Fasting induces a highly resilient deep quiescent state in muscle stem cells via ketone body signaling**

Benjamin, D. I., Both, P., Benjamin, J. S., Nutter, C. W., Tan, J. H., Kang, J., Machado, L. A., Klein, J. D. D., de Morree, A., Kim, S., Liu, L., Dulay, H., Feraboli, L., Louie, S. M., Nomura, D. K. & Rando, T. A., 7 jun. 2022, I: Cell Metabolism. 34, 6, s. 902-918.e6

### **Cell types of origin of the cell-free transcriptome**

Vorperian, S. K., Moufarrej, M. N., Tabula Sapiens Consortium & Quake, S. R., jun. 2022, I: Nature Biotechnology. 40, 6, s. 855-861 7 s.

### **The Tabula Sapiens: A multiple-organ, single-cell transcriptomic atlas of humans**

Tabula Sapiens Consortium\*, 13 maj 2022, I: Science (New York, N.Y.). 376, 6594, s. eabl4896 abl4896.

### **Adversarial domain translation networks for integrating large-scale atlas-level single-cell datasets**

Zhao, J., Wang, G., Ming, J., Lin, Z., Wang, Y., The Tabula Microcebus Consortium, Wu, A. R. & Yang, C., maj 2022, I: Nature Computational Science. 2, 5, s. 317-330 14 s.

### **ATR activity controls stem cell quiescence via the cyclin F-SCF complex**

Salvi, J. S., Kang, J., Kim, S., Colville, A. J., de Morrée, A., Billeskov, T. B., Larsen, M. C., Kanugovi, A., van Velthoven, C. T. J., Cimprich, K. A. & Rando, T. A., maj 2022, I: Proceedings of the National Academy of Sciences (PNAS). 119, 18, s. e2115638119 e2115638119.

### **Molecular hallmarks of heterochronic parabiosis at single-cell resolution**

Pálovics, R., Keller, A., Schaum, N., Tan, W., Fehlmann, T., Borja, M., Kern, F., Bonanno, L., Calcuttawala, K., Webber, J., McGeever, A., Tabula Muris Consortium, Luo, J., Pisco, A. O., Karkanias, J., Neff, N. F., Darmanis, S., Quake, S. R. & Wyss-Coray, T., mar. 2022, I: Nature. 603, 7900, s. 309-314 6 s.

### **RNA splicing programs define tissue compartments and cell types at single-cell resolution**

Olivieri, J. E., Dehghannasiri, R., Wang, P. L., Jang, S., de Morree, A., Tan, S. Y., Ming, J., Ruohao Wu, A., Quake, S. R., Krasnow, M. A. & Salzman, J., 13 sep. 2021, I: eLife. 10, e70692.

### **Institutions' role in postpandemic support**

de Morree, A. & Al'Ai, A., sep. 2021, I: Science. 373, 6561, s. 1318 1 s.

### **Magnetic: How Great Leaders Persuade and Inspire**

de Morree, A., 14 jul. 2021

### **Becoming Magnetic: A Communication Handbook for Future Leaders**

de Morree, A., 1 dec. 2020, Kendall/Hunt Publishing Co.

### **Ageing hallmarks exhibit organ-specific temporal signatures**

The Tabula Muris Consortium, jul. 2020, I: Nature. 583, 7817, s. 596-602 7 s.

### **A single-cell transcriptomic atlas characterizes ageing tissues in the mouse**

The Tabula Muris Consortium, jul. 2020, I: Nature. 583, 7817, s. 590-595 6 s.

### **Exercise rejuvenates quiescent skeletal muscle stem cells in old mice through restoration of Cyclin D1**

Brett, J. O., Arjona, M., Ikeda, M., Quarta, M., de Morrée, A., Egner, I. M., Perandini, L. A., Ishak, H. D., Goshayeshi, A., Benjamin, D. I., Both, P., Rodríguez-Mateo, C., Betley, M. J., Wyss-Coray, T. & Rando, T. A., apr. 2020, I: Nature Metabolism. 2, 4, s. 307-317 11 s.

### **Alternative polyadenylation of Pax3 controls muscle stem cell fate and muscle function**

de Morree, A., Klein, J. D. D., Gan, Q., Farup, J., Urtasun, A., Kanugovi, A., Bilen, B., Van Velthoven, C. T. J., Quarta, M. & Rando, T. A., nov. 2019, I: *Science*. 366, 6466, s. 734-738 5 s.

### **Single-cell transcriptomics of 20 mouse organs creates a Tabula Muris**

de Morree, A. & The Tabula Muris Consortium, 18 okt. 2018, I: *Nature*. 562, 7727, s. 367-372 6 s.

### **Transcriptional Profiling of Quiescent Muscle Stem Cells In Vivo**

van Velthoven, C. T. J., de Morree, A., Egner, I. M., Brett, J. O. & Rando, T. A., 14 nov. 2017, I: *Cell Reports*. 21, 7, s. 1994-2004 11 s.

### **Staufen1 inhibits MyoD translation to actively maintain muscle stem cell quiescence**

de Morrée, A., van Velthoven, C. T. J., Gan, Q., Salvi, J. S., Klein, J. D. D., Akimenko, I., Quarta, M., Biressi, S. & Rando, T. A., 24 okt. 2017, I: *Proceedings of the National Academy of Sciences (PNAS)*. 114, 43, s. E8996-E9005

### **United We Stand**

de Morree, A., Collman, F., Gordon, C. & Klabunde, M., 28 sep. 2017, I: *Nature*. 549, 555

**Deltex2 represses MyoD expression and inhibits myogenic differentiation by acting as a negative regulator of Jmjd1c**  
Luo, D., de Morree, A., Boutet, S., Quach, N., Natu, V., Rustagi, A. & Rando, T. A., 11 apr. 2017, I: *Proceedings of the National Academy of Sciences (PNAS)*. 114, 15, s. E3071-E3080

### **An artificial niche preserves the quiescence of muscle stem cells and enhances their therapeutic efficacy**

Quarta, M., Brett, J. O., DiMarco, R., De Morree, A., Boutet, S. C., Chacon, R., Gibbons, M. C., Garcia, V. A., Su, J., Shrager, J. B., Heilshorn, S. & Rando, T. A., jul. 2016, I: *Nature Biotechnology*. 34, 7, s. 752-9 8 s.

### **Outside the tower. A night at the museum**

de Morrée, A., 18 jul. 2014, I: *Science (New York, N.Y.)*. 345, 6194, s. 279

### **Science Time Travel**

de Morree, A., 5 jul. 2013, I: *Science*. 341

### **Dysferlin regulates cell adhesion in human monocytes**

de Morrée, A., Flix, B., Bagaric, I., Wang, J., van den Boogaard, M., Grand Moursel, L., Frants, R. R., Illa, I., Gallardo, E., Toes, R. & van der Maarel, S. M., 17 maj 2013, I: *The Journal of Biological Chemistry*. 288, 20, s. 14147-14157 11 s.

### **NextGen speaks [9]**

De Morrée, A., 2013, I: *Science*. 341, 6141, s. 30 1 s.

### **GREG cells, a dysferlin-deficient myogenic mouse cell line**

Humphrey, G. W., Mekhedov, E., Blank, P. S., de Morree, A., Pekkurnaz, G., Nagaraju, K. & Zimmerberg, J., 15 jan. 2012, I: *Experimental Cell Research*. 318, 2, s. 127-35 9 s.

### **Self-regulated alternative splicing at the AHNAK locus**

de Morrée, A., Droog, M., Grand Moursel, L., Bisschop, I. J. M., Impagliazzo, A., Frants, R. R., Klooster, R. & van der Maarel, S. M., jan. 2012, I: *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*. 26, 1, s. 93-103 11 s.

### **In silico discovery and experimental validation of new protein-protein interactions**

van Haagen, H. H. H. B. M., 't Hoen, P. A. C., de Morrée, A., van Roon-Mom, W. M. C., Peters, D. J. M., Roos, M., Mons, B., van Ommen, G.-J. & Schuemie, M. J., mar. 2011, I: *Proteomics*. 11, 5, s. 843-53 11 s.

**Comparison of dysferlin expression in human skeletal muscle with that in monocytes for the diagnosis of dysferlin myopathy**

Gallardo, E., de Luna, N., Diaz-Manera, J., Rojas-García, R., Gonzalez-Quereda, L., Flix, B., de Morrée, A., van der Maarel, S. & Illa, I., 2011, I: PLOS ONE. 6, 12, s. e29061

Proteomic analysis of the dysferlin protein complex unveils its importance for sarcolemmal maintenance and integrity de Morrée, A., Hensbergen, P. J., van Haagen, H. H. H. B. M., Dragan, I., Deelder, A. M., 't Hoen, P. A. C., Frants, R. R. & van der Maarel, S. M., 5 nov. 2010, I: PLOS ONE. 5, 11, s. e13854

Calpain 3 is a rapid-action, unidirectional proteolytic switch central to muscle remodeling

de Morrée, A., Lutje Hulsik, D., Impagliazzo, A., van Haagen, H. H. H. B. M., de Galan, P., van Remoortere, A., 't Hoen, P. A. C., van Ommen, G. B., Frants, R. R. & van der Maarel, S. M., 4 aug. 2010, I: PLOS ONE. 5, 8, s. e11940

**Novel protein-protein interactions inferred from literature context**

van Haagen, H. H. H. B. M., 't Hoen, P. A. C., Botelho Bovo, A., de Morrée, A., van Mulligen, E. M., Chichester, C., Kors, J. A., den Dunnen, J. T., van Ommen, G.-J. B., van der Maarel, S. M., Kern, V. M., Mons, B. & Schuemie, M. J., 18 nov. 2009, I: PLOS ONE. 4, 11, s. e7894

**Calpain 3 is a modulator of the dysferlin protein complex in skeletal muscle**

Huang, Y., de Morrée, A., van Remoortere, A., Bushby, K., Frants, R. R., den Dunnen, J. T. & van der Maarel, S. M., 15 jun. 2008, I: Human Molecular Genetics. 17, 12, s. 1855-66 12 s.

**Insect lipoprotein biogenesis depends on an amphipathic beta cluster in apolipoprotein III and is stimulated by microsomal triglyceride transfer protein**

Smolenaars, M. M. W., de Morrée, A., Kerver, J., Van der Horst, D. J. & Rodenburg, K. W., sep. 2007, I: Journal of Lipid Research. 48, 9, s. 1955-65 11 s.