



Office of the Chancellor

June 6, 2026

Legal Division
State Ethics Commission
One Ashburton Place
Boston, MA 02108

RE: Yelena Bernadskaya - Disclosure under M.G.L. Chapter 268A, Section 6

Dear Sir/Madam:

Pursuant to M.G.L. Chapter 268A, Section 6, I enclose the following documents for filing with the Ethics Commission as required under the statute:

1. Disclosure of Financial Interest form, dated June 6, 2026, and letter, dated June 1, 2026, from Assistant Professor Yelena Bernadskaya requesting permission to appoint her spouse, Dr. Andreas Tjärnberg, as a Senior Research Fellow in her research group, in the Department of Biology.
2. My letter of determination, dated June 6, 2026, which permits Assistant Professor Yelena Bernadskaya to appoint her spouse, Dr. Andreas Tjärnberg, as a Senior Research Fellow in her research group, in the Department of Biology.

Very truly yours,

Signed by:

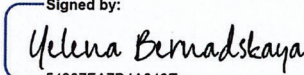
A handwritten signature in black ink, appearing to read "Javier A. Reyes", written over a horizontal line.

E2C62B100CBB443...
Javier A. Reyes
Chancellor

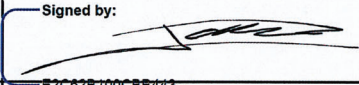
Enclosures

**DISCLOSURE BY NON-ELECTED STATE EMPLOYEE OF FINANCIAL INTEREST
AND DETERMINATION BY APPOINTING AUTHORITY
AS REQUIRED BY G. L. c. 268A, § 6**

	STATE EMPLOYEE INFORMATION
Name:	Yelena Bernadskaya
Title or Position:	Assistant Professor
State Agency:	University of Massachusetts Amherst
Agency Address:	Department of Biology Morrill Science Center
Office Phone:	(413) 545-1082
Office E-mail:	ybernadskaya@umass.edu
	My duties require me to participate in a particular matter, and I may not participate because of a financial interest that I am disclosing here. I request a determination from my appointing authority about how I should proceed.
	PARTICULAR MATTER
Particular matter E.g., a judicial or other proceeding, application, submission, request for a ruling or other determination, contract, claim, controversy, charge, accusation, arrest, decision, determination, or finding.	Please describe the particular matter. Appointing Dr. Andreas Tjärnberg , spouse of Dr. Yelena Bernadskaya, as a Senior Research Fellow in Dr. Bernadskaya's lab, with the Biology department chair, Paul Katz, as Dr. Tjärnberg 's supervisor. Dr. Andreas Tjärnberg 's combination of skills and experience in systems biology and machine learning is unique to the work in Dr. Bernadskaya's lab, and such skills and experience cannot be recruited through other means. Please see Dr. Bernadskaya's accompanying memo for details about the position and Dr. Tjärnberg's fit and qualifications.
Your required participation in the particular matter: E.g., approval, disapproval, decision, recommendation, rendering advice, investigation, other.	Please describe the task you are required to perform with respect to the particular matter. Faculty member and director of the lab in which Dr. Tjärnberg will be employed.
	FINANCIAL INTEREST IN THE PARTICULAR MATTER
Write an X by all that apply.	☐ I have a financial interest in the matter. ☒ My immediate family member has a financial interest in the matter. ☐ My business partner has a financial interest in the matter. ☐ I am an officer, director, trustee, partner or employee of a business organization, and the business organization has a financial interest in the matter. ☐ I am negotiating or have made an arrangement concerning future employment with a person or organization, and the person or organization has a financial interest in the matter.

Financial interest in the matter	Please explain the financial interest and include a dollar amount if you know it. Dr. Tjärnberg's base salary will be \$70,000, thus 50% effort is to be paid from Dr. Bernadskaya StartUp account (ST 194755) is \$35,000. The other 50% (\$35,000) will be paid by the Biology department.
Employee signature:	Signed by:  54307EA7D4A849E...
Date:	06/06/2026

DETERMINATION BY APPOINTING OFFICIAL

	APPOINTING AUTHORITY INFORMATION
Name of Appointing Authority:	Javier A. Reyes
Title or Position:	Chancellor
Agency/Department:	University of Massachusetts / Office of the Chancellor
Agency Address:	374 Whitmore Building Amherst MA 01003
Office Phone:	413-545-2211
Office E-mail	chancellorreyes@umass.edu
	DETERMINATION
Determination by appointing authority: Write an X by your selection.	As appointing official, as required by G.L. c. 268A, § 6, I have reviewed the particular matter and the financial interest identified above by a state employee. ☐ I am assigning the particular matter to another employee, or ☐ I am assuming responsibility for the particular matter, or ☒ I have determined that the financial interest is not so substantial as to be deemed likely to affect the integrity of the services which the Commonwealth may expect from the employee.
Appointing Authority signature:	Signed by:  E2C62B100C8B443...
Date:	06/06/2026
Comment:	

Attach additional pages if necessary.

File copy with:

State Ethics Commission, One Ashburton Place, Room 619, Boston, MA 02108



University of
Massachusetts
Amherst

College of Natural Sciences

Department of Biology

Yelena Bernadskaya, Ph.D.

Assistant Professor

June 01, 2026

Chancellor Javier A. Reyes
Chancellor's Office
374 Whitmore Building
University of Massachusetts
Amherst MA 01003

Dear Chancellor Reyes,

I am requesting permission to appoint my spouse, Dr. Andreas Tjärnberg as a Senior Research Fellow in my research group. Dr. Tjärnberg is vital to my current and future work as his expertise in systems biology and machine learning is fundamental to working with large, multi-omic data sets that are being generated in the lab and which will form the basis of my proposals for NIH and NSF grant funding. Dr. Tjärnberg will also serve as a valuable and critical expert in AI engineering with a focus on biological modeling and interpretation for the entirety of the UMass Biology department as well as providing graduate students and postdocs in my group with training and guidance for their academic development within the field of AI tool use for biological analysis.

My lab studies how the genetic and physical rules affecting individual cells regulate formation of complex tissues in embryos. We use the ascidian *Ciona robusta*, a marine invertebrate, to understand how the dynamics of gene expression regulate the physical behaviors of cells and tissues. We are generating large complex genomic, transcriptomic, and multi-omic datasets that describe changes in gene expression that underlie development and coupling these with high-content image analysis of embryonic development to integrate the changes in gene expression with the physicality of cell movement and behavior in whole embryos. We are now also beginning to study the evolutionary relationships between closely related ascidians and compare changes in gene regulation and expression that underlie speciation.

Dr. Tjärnberg has extensive experience working with *Ciona robusta*. This expertise, along with a keen interest in fundamental biology, provides a unique resource for my lab that cannot be recruited through other means. Through our previous work together, we have produced a transcriptional map of *Ciona* embryos, for which Dr. Tjärnberg has created an interactive ShinyApp that is a resource to the *Ciona* research community (Bernadskaya, Tjärnberg, et al, 2025). This work forms the foundation for future development of interactive resources key to providing my lab with an overview of the data we intend to generate. As such Dr. Tjärnberg will continue to develop this interactive resource that will provide a hypothesis generator for my lab's experimental work.

Dr. Tjärnberg will use machine learning and AI-informed methods in order to generate genetic regulatory models of embryonic development using the primary data produced in the lab. This includes identifying dynamic changes in gene expression during development perturbation, developing methods that integrate cellular morphology with transcriptional dynamics, and generate models of transcriptional dynamics that drive differentiation of embryonic cell lineages. He will develop a computational pipeline to

design CRISPR/Cas9 guide RNAs for the *Ciona* genome with unique features that allow for optimized targeting of multiple gene exons to increase efficiency of sgRNA-induced knockouts. A tool that will be important for my lab's future research and success as we identify genes that regulate embryonic morphogenesis.

Dr. Tjärnberg's base salary is \$70,000 per year with 100% FTE with the proposed start date 06/06/26 – 06/05/27, to be funded 50% from my startup, which is provided to me by the university as part of my initial appointment in order to start my lab, with a contributed 50% from the Department of Biology. No outside grant funding will be used to fund this position.

Dr. Tjärnberg has a combination of skills that would be impossible to find in another Research Associate located in the Pioneer Valley. He is an expert with an extensive record in deep learning, machine learning, and works on the cusp of AI-engineering for the purpose of developing computational approaches to work with large-scale data sets. He has already been recognized by my UMass colleagues as a future collaborator for their research utilizing single-cell genomics and multiple colleagues have submitted recommendation letters on his behalf, making Dr. Tjärnberg a valued technical resource beyond my own lab that currently does not exist within the Biology Department.

In summary, Dr. Tjärnberg's combined expertise in machine learning, bioinformatics, and multi-modal data interpretation is extensive and crucial to the success of my current work and to expand the scope of the lab's future funding. He will work to develop new machine-learning algorithms to help my lab work with multi-modal data sets and provide additional mentorship to the lab members who will need to develop advanced skills working with new AI technologies in order to advance their career prospect.

Please feel free to reach out to me if you require more information.

Sincerely,



Yelena Bernadskaya, Ph.D.
Assistant Professor,
Department of Biology, UMass Amherst
Phone: 718-675-9985 Email: ybernadskaya@umass.edu



Office of the Chancellor

June 6, 2026

Assistant Professor Yelena Bernadskaya
Department of Biology
College of Natural Sciences
University of Massachusetts Amherst
611 N. Pleasant Street
Amherst, MA 01003

Dear Assistant Professor Bernadskaya:

I acknowledge receipt of your Disclosure of Financial Interest form, dated June 6, 2026 and letter, dated June 1, 2026. You request permission to appoint your spouse, Dr. Andreas Tjärnberg, as a Senior Research Fellow in your research group from June 6, 2026 through June 5, 2027. You indicate that Dr. Tjärnberg would be paid 50% through your University start-up funds and 50% through the University of Massachusetts Amherst's Department of Biology. Dr. Tjärnberg's salary will be \$70,000.00 per year, at 100% FTE.

You report that your lab studies how the genetic and physical rules affecting individual cells regulate formation of complex tissues in embryos, using the ascidian *Ciona robusta*, a marine invertebrate, to understand how the dynamics of gene expression regulate the physical behaviors of cells and tissues. You indicate that Dr. Tjärnberg is vital to your current and future work as his expertise in systems biology and machine learning is fundamental to working with large, multi-omic data sets and these types of data sets will form the basis of your proposals for NIH and NSF grant funding. Additionally, you indicate that Dr. Tjärnberg has extensive experience working with *Ciona robusta*. Through your previous work together, Dr. Tjärnberg produced a transcriptional map of *Ciona* embryos, and created an interactive ShinyApp, which is used as a resource to the *Ciona* research community (Bernadskaya, Tjärnberg, et al, 2025). Dr. Tjärnberg's work on the ShinyApp will provide a hypothesis generator for the experimental work of your lab. Further, you state that Dr. Tjärnberg will use machine learning and AI-informed methods in order to generate genetic regulatory models of embryonic development using the primary data produced in the lab. Lastly, you state that Dr. Tjärnberg will develop a computational pipeline to design CRISPR/Cas9 guide RNAs for the *Ciona* genome with unique features that allow for optimized targeting of multiple gene exons to increase efficiency of sgRNA-induced knockouts. This tool will be important for your lab's future research and success as you both identify genes that regulate embryonic morphogenesis.

You report that your husband, Dr. Tjärnberg, has a combination of skills that would be impossible to find in another research fellow in the region. Dr. Tjärnberg's combined expertise in deep learning, machine learning, and his work on the cusp of AI-engineering for the purpose of developing computational approaches to work with large-scale data sets is extensive and is crucial to the success of your current work and will expand the scope of your lab's future funding. You indicate that Dr. Tjärnberg has been recognized by your UMass colleagues as a future collaborator for their research utilizing single-cell genomics and multiple colleagues have submitted recommendation letters on his behalf, making him a valued technical resource beyond your lab.

According to Chair of Biology Paul Katz's memorandum, dated May 18, 2026, he will directly supervise Dr. Tjärnberg for matters including pay and performance.

Massachusetts General Laws Chapter 268A, Section 6, in part, prohibits a state employee from employing immediate family members and from compensating them for services rendered except when I "make a written determination that the interest is not so substantial as to be deemed likely to affect the integrity of the services which the Commonwealth may expect from [. . . you], in which case it shall not be a violation for [. . . you] to participate in the particular matter."

I determine that any personal interest you may have in this appointment is not so substantial as to be deemed likely to affect the integrity of your services to the Commonwealth and the Department of Biology. This determination to appoint your spouse will allow you to utilize his services for one (1) year from June 6, 2026 to June 5, 2027.

The statute requires you to advise the Ethics Commission of the nature and circumstances of the particular matter and make full disclosure of the financial interest. As directed by statute, I am sending a copy of this written determination letter along with your Memorandum and Disclosure form, to the State Ethics Commission for filing.

Sincerely,

Signed by: 
E2C62B100CB8443...
Javier A. Reyes
Chancellor

Enclosures

cc: Fouad Abd-El-Khalick, Provost
Sophia A. Apostola, Associate Counsel

UMassAmherst

College of Natural Sciences
Biology

Memorandum

TO: Chancellor Javier Reyes

FROM: Paul Katz, Chair of Biology

DATE: May 18, 2026

RE: Support of nepotism waiver for Andreas Tjärnberg

The Biology Department supports a nepotism waiver being granted to Dr. Andreas Tjärnberg effective June 6, 2026 – June 5, 2027. Dr. Tjärnberg is uniquely qualified to hold this position for the reasons detailed in Dr. Bernadskaya's accompanying memo. Dr. Tjärnberg would work in Dr. Bernadskaya's lab but would report directly to me as his supervisor for matters including pay and performance.

Signed by:

MICHAEL FOX

5/20/2026

I concur:

Michael A Fox

Dean, College of Natural Sciences