

UNIVERSITY OF MINNESOTA

*Government and Community Relations
Office of the President*

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TO: Chris Steller, Minnesota Legislative Reference Library

FROM: Keeya Steel, University of Minnesota Government and Community Relations

DATE: January 15, 2019

RE: Regenerative Medicine Partnership Mandated Report

Enclosed are two copies of the mandated report, Regenerative Medicine Partnership, pursuant to 2014 Minnesota Laws Chapter 312, Article 1, Section 4, Subdivision 2.

This report can also be found online: <http://government-relations.umn.edu/state/legislative-materials>

If you have any questions regarding this report or to obtain additional copies, please contact the Office of Government and Community Relations at 612-626-9234.

cc: Senator Paul Anderson, Senate Higher Education Finance and Policy Chair
Senator Greg Clausen, Senate Higher Education Finance and Policy Ranking
Minority Member
Representative Connie Bernardy, House Higher Education Finance and Policy Chair
Representative Bud Nornes, House Higher Education Finance and Policy Ranking
Minority Member
Senator Eric Pratt, Senate Jobs and Economic Growth Finance and Policy Chair
Senator Bobby Joe Champion, Senate Jobs and Economic Growth Finance and Policy
Ranking Minority Member
Representative Tim Mahoney, House Jobs and Economic Development Finance Chair
Representative Bob Gunther, House Jobs and Economic Development Finance Ranking
Minority Member
Representative Gene Pelowski, House Greater Minnesota Jobs and Economic
Development Finance Chair
Representative Paul Anderson, House Greater Minnesota Jobs and Economic
Development Finance Ranking Minority Member



January 15, 2019

Senator Paul Anderson, Chair, Higher Education Finance and Policy
Senator Greg Clausen, Ranking Minority Lead, Higher Education Finance and Policy
Representative Connie Bernardy, Chair, Higher Education Finance and Policy
Representative Bud Nornes, Ranking Minority Lead, Higher Education Finance and Policy

Senator Eric Pratt, Chair, Jobs and Economic Growth
Senator Bobby Joe Champion, Ranking Minority Lead, Job and Economic Growth
Representative Mahoney, Chair, Jobs and Economic Development Finance Division
Representative Bob Gunther, Ranking Minority Lead on Jobs and Economic Development Finance Division
Representative Gene Pelowski, Chair, Greater Minnesota Jobs and Economic Development Finance Division
Representative Paul Anderson, Ranking Minority Lead, Greater Minnesota Jobs and Economic Development Finance Division

Dear Legislators,

Per Chapter 312, Article 1, Section 4 of Laws of Minnesota 2014, please accept our report on the Regenerative Medicine Minnesota (RMM) partnership. Included in this package you will find the required auditors' report on their review of the program. We have also included a one-page summary of awards made and expected total spending against those awards and a map showing the geographic location of the awards throughout the state of Minnesota.

RMM is administered jointly by Dr. Jakub Tolar at the University of Minnesota and Dr. André Terzic at the Mayo Clinic, with input and oversight by a board including representation from biomedical industry, education, legislature, and clinical medicine.

The RMM program has been a resounding success to date. In the first two years of the program (FYs 15-16), 15 research programs were funded that address critical health care needs such as heart disease, diabetes, Parkinson's disease, degenerative arthritis, blood cancers, ALS, and brain and spine injury. Additionally, 13 awards were made to small businesses for development of regenerative medicine infrastructure such as cell culture technologies, as well as for new technologies such as a system to support the growth of artificial lungs and development of a vascular graft that can grow with young heart patients and eliminate the need for repeated open-heart surgeries.

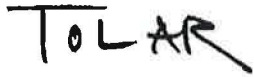
In the past two years of the program (FYs 17-18), via the funding of 25 grants, the education program has expanded throughout the state, reaching students from Kindergarten to doctoral candidates. A network of curriculum and resource sharing evolved organically out of one of our first year grants, and it has helped rapidly provide these resources to schools wanting to participate. Funds went to create a

biology lab/major at Bemidji State University and to fund several programs for students at reservation schools in northern Minnesota. RMM has funded 23 research programs that address high impact health problems like liver disease, diabetes, cancer, spinal cord regeneration, and fetoscopic repair of a severe heart defect. Biobusiness programs received 16 additional awards in areas as diverse as nerve regeneration and using stem cells to line a manufactured airway.

More information about all of these programs are available on our website: www.regenmedmn.org.

Thank you for your support of Regenerative Medicine Minnesota. We look forward to a productive and exciting future as we work to improve the health of Minnesotans across the state.

Sincerely,

Handwritten signature of Jakub Tolar in black ink, appearing as 'TOLAR'.

Jakub Tolar, MD, PhD
Vice President for Academic Clinical Affairs
University of Minnesota

Handwritten signature of Gregory Gores in black ink, appearing as 'Gregory Gores'.

Gregory Gores, MD
Executive Dean for Research
Mayo Clinic

c: Andre Terzic, MD, PhD
Senator Dick Cohen
Rep. Tony Albright



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Independent Accountant's Report on Applying Agreed-Upon Procedures

Management of the University of Minnesota
1300 South Second Street
Minneapolis, MN 55454

We have performed procedures enumerated below, which were agreed to by the University of Minnesota Controller's Office, on the University of Minnesota's (the "University") compliance with Chapter 69, Article 1, Section 5 of the Laws of Minnesota. The University of Minnesota Controller's Office is responsible for the University's compliance with Chapter 69, Article 1, Section 5 of the Laws of Minnesota. The sufficiency of these procedures is solely the responsibility of the parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures enumerated below either for the purpose for which this report has been requested or for any other purpose.

Our procedures and findings are as follows:

We obtained the Statement of Expenditures by Subrecipient (the "Statement") for the period from July 1, 2016 to June 30, 2018, and the Attachment of Subrecipients with Affiliations (the "Attachment") as prepared by management. The Attachment has been included as Exhibit A to this report.

1. We recalculated the total dollar amounts on the Statement and compared the amounts on each line on the Statement to the corresponding amounts on the reconciliation prepared by management between the University's general ledger and the amounts on the Statement, noting no exceptions.
2. We compared the dollar amounts on management's reconciliation to the University's general ledger and recalculated the total presented in the Statement, noting no exceptions.
3. We compared actual expenditures by project number to the Budget Information section of the Notice of Grant Awarded (NoGA) obtained from management. We noted no project numbers where total expenditures by project number exceeded the approved budget limit.
4. We randomly selected five of the Principal Investigators (PI) affiliated with the University from the Statement, which represented 20% of the total PIs affiliated with the University, and obtained the expenditure detail for the selected PIs during the period from July 1, 2016 to June 30, 2018. We randomly selected 40 total expenditure selections from the expenditure detail and traced and agreed the amounts to source documents, noting no exceptions.
5. We randomly selected five PIs whose affiliations are outside of the University from the Statement and obtained the subaward agreements from management. We inspected the subaward agreements for evidence of appropriate approvals by the University and the sub-recipient, noting no exceptions.
6. We obtained and documented an understanding of the University's policies and procedures in place to monitor that awards are expended in accordance with Chapter 69, Article 1, Section 5 of the Laws of Minnesota, noting policies and procedures were in place and appropriately applied based on the understanding we obtained.

This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. We were not engaged to and did not conduct an examination or review, the objective of which would be the expression of an opinion or conclusion, respectively, on the University's compliance with Chapter 69, Article 1, Section 5 of the Laws of Minnesota. Accordingly, we do not express such an opinion or conclusion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of the University, the University's Board of Regents, and authorized representatives of the State of Minnesota, and is not intended to be and should not be used by anyone other than these specified parties.

Deloitte & Touche LLP

November 14, 2018

Exhibit A

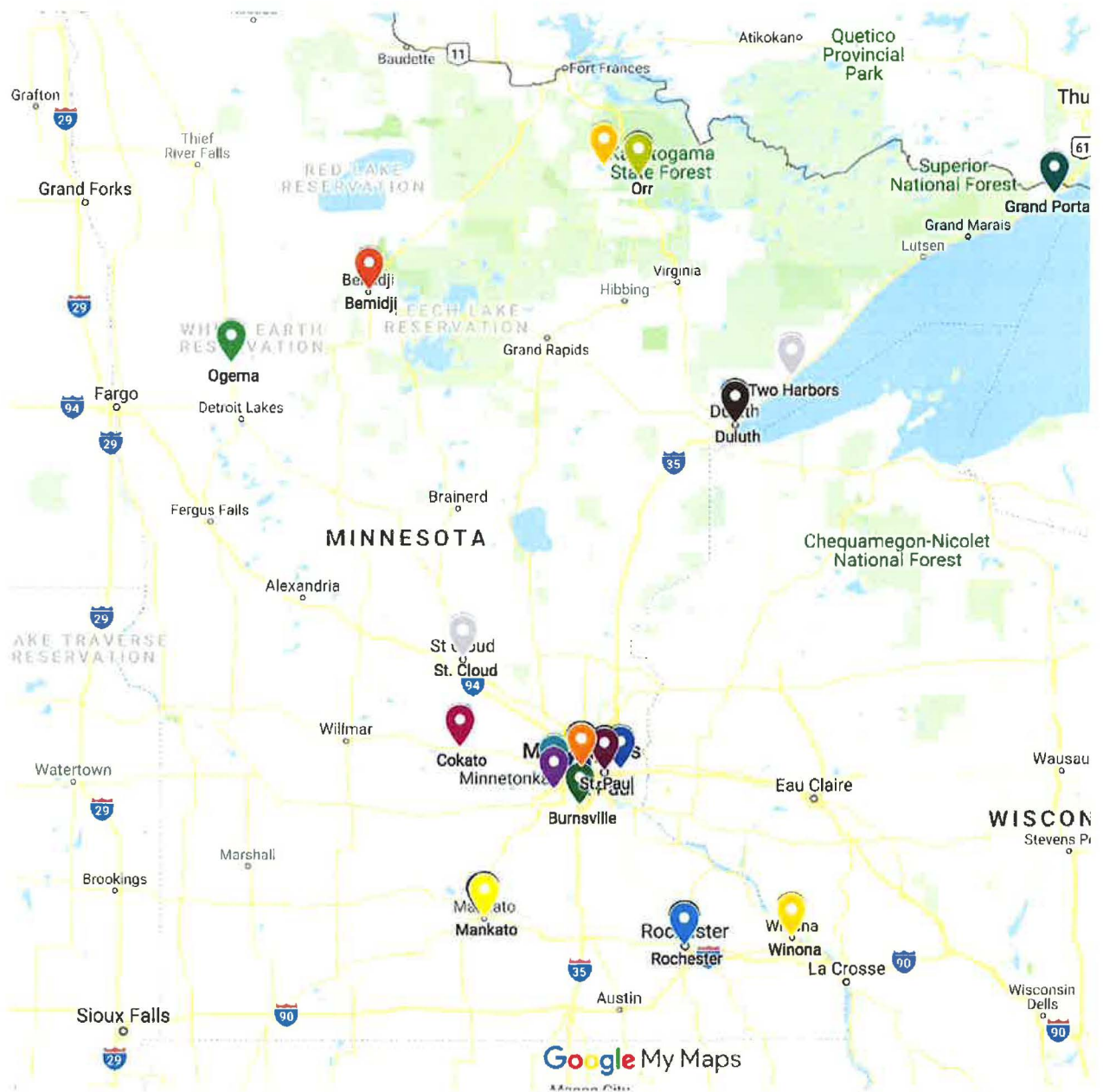
Attachment of Subrecipients with Affiliations
For the period from July 1, 2016 to June 30, 2018

<u>Recipient</u>	<u>Affiliation</u>
Bruns, Jason	*
Burns, Terence	Mayo Clinic
Bydon, Mohamad	Mayo Clinic
Carlson, Daniel	*
Chan, Sunny	University of Minnesota
Chen, Ping	Mayo Clinic
Cvetanovic, Marija	University of Minnesota
Daughters, Randy	*
DeSilva, Mauris	*
Devaux, Patricia	Mayo Clinic
Dragomir-Daescu, Dan	Mayo Clinic
Dutton, James	University of Minnesota
Echeverri, Karen	University of Minnesota
Foxen, Jilian	Mayo Clinic
French, Karlene	*
Garry, Daniel	University of Minnesota
Hogdal, Leah	*
Holtan, Shernan	University of Minnesota
Huppert, Melissa	*
Ikeda, Yasuhiro	Mayo Clinic

Recipient	Affiliation
Jang, Mi-Hyeon	Mayo Clinic
Kenderian, Saad	Mayo Clinic
Kikyo, Nobuaki	University of Minnesota
Krych, Aaron	Mayo Clinic
Lillegard, Joseph	Mayo Clinic
Low, Walter	University of Minnesota
Lund, Troy	University of Minnesota
McAlpine, Michael	University of Minnesota
Ninas, Jonathon	Mayo Clinic
O'Brien, Timothy	*
Osborn, Mark	University of Minnesota
Owen, Mary	University of Minnesota
Rao, Raghavendra	University of Minnesota
Reinhart, Todd	*
Resch, Zachary	Mayo Clinic
Revzin, Alexander	Mayo Clinic
Ruano, Rodrigo	Mayo Clinic
Schorgl, John	*
Thompson, James	*
Tranquillo, Robert	University of Minnesota
Uzarski, Joseph	*
van Berlo, Jop	University of Minnesota
Wallert, Mark	*

Recipient	Affiliation
Wallis, Alicia	*
Westendorf, Jennifer	Mayo Clinic
Wilson, Tracy	*
Wirta Kosobuski, Anna	University of Minnesota
Wyles, Saranya	Mayo Clinic
Yamada, Satsuki	Mayo Clinic
Zojonc, Stephanie	*

*Researcher is not affiliated with the University of Minnesota or Mayo Clinic



Map of RMM grant funding distribution as of 11/15/2018
 Includes research, biobusiness/biotechnology and education grants K-post-doctoral.



**Regenerative Medicine Minnesota
Awards Made 7.1.16 - 6.30.18**

	Number of Awards	Dollars Awarded	Start Date	Award Term	Expended 7/1/16 through 6/30/18	Encumbered FY19 Spending	Projected Encumbered FY20 Spending	Projected Total Spending
FY17								
Research Grants - Discovery Science	6	\$ 1,499,817	Mar - May 2017	2 years	\$ 842,604	657,213		1,499,817
Research Grants - Translational Science	2	\$ 500,000	Mar - May 2017	2 years	\$ 276,471	223,529		500,000
Clinical Trials	2	\$ 997,966	March 2017	2 years	\$ 244,885	400,000	353,081	997,966
Biotechnology/BioBusiness Grants	9	\$ 898,218	May - Aug 2017	1 year	\$ 667,913	230,195		898,108
Education Programs - Grades 3-12	7	\$ 122,069	May - Sept 2017	1 year	\$ 80,258	26,021		106,279
Education Programs - College	3	\$ 280,267	May - June 2017	1 year	\$ 257,888	4,986		262,874
Graduate Scholars	2	\$ 170,393	June 2017	1 year	\$ 108,814	4,201		113,015
		\$ 4,468,730			\$ 2,478,833	\$ 1,546,145	\$ 353,081	\$ 4,378,059
Funding available	NOTE 1	\$ 4,350,000						
FY18								
Research Grants - Discovery Science	6	\$ 1,491,489	Mar-May 2018	2 years	\$ 86,337	905,152	500,000	1,491,489
Research Grants - Translational Science	5	\$ 1,249,996	March 2018	2 years	\$ 113,194	736,802	400,000	1,249,996
Clinical Trials	2	\$ 998,000	Mar - Apr 2018	2 years		499,000	499,000	998,000
Biotechnology/BioBusiness Grants	7	\$ 655,851	May - July 2018	1 year	\$ 22,826	633,025		655,851
Education Programs - Grades 3-12	9	\$ 129,615	May - Sept 2018	1 year		129,615		129,615
Education Programs - College	2	\$ 124,202	May - Sept 2018	1 year		124,202		124,202
Graduate Scholars	2	\$ 146,571	May - June 2018	1 year		146,571		146,571
		\$ 4,795,724			\$ 222,357	\$ 3,174,367	\$ 1,399,000	\$ 4,795,724
Funding available	NOTE 1	\$ 4,350,000						

NOTE 1 Additional funding was carried forward from unspent prior years. Any remaining available balance will be carried forward into future years to be used for new awards.