OM8 No. 0651-0027 (exp. 8/30/2008)	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Of			
	ORM COVER SHEET			
To the Director of the U.S. Patent and Trademark Officer, Di-	TS ONLY ase record the attached documents or the new address(es) below.			
1. Name of conveying party(ies)				
Board of Trustees of Michigan State University	2. Name and address of receiving party(ies)			
- · · · · · · · · · · · · · · · · · · ·	Name: Synageva BioPharma Corp.			
	Internal Address:			
Additional name(s) of conveying party(les) attached? Yes 🗹 N	o			
3. Nature of conveyance/Execution Date(s):	Street Address: <u>111 Riverbend Road</u>			
Execution Date(s) April 7, 2009				
Assignment Merger				
Security Agreement Change of Name	City: Athens			
Joint Research Agreement	State: GA			
Government Interest Assignment				
Executive Order 9424, Confirmatory License	Country: USAZip:30605			
Other				
4. Application or patent number(s):	Additional name(s) & address(es) attached? Yes V N document is being filed together with a new application			
	B. Patent No.(s)			
12/008,399 Published as US 2009/0042299	6,825,396 issued November 30, 2004			
	7,378,086 Issued May 27, 2008			
Additional numbers at				
5. Name and address to whom correspondence	6. Total number of applications and patents			
 Name and address to whom correspondence concerning document should be mailed; 				
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Kyle Yesland</u>	6. Total number of applications and patents			
 Name and address to whom correspondence concerning document should be mailed; 	6. Total number of applications and patents involved: 3			
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Kyle Yesland</u> Internal Address: <u>Synageva BloPharma Corp.</u>	6. Total number of applications and patents involved: <u>3</u> 7. Total fee (37 CFR 1.21(h) & 3.41) \$_120.			
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Kyle Yesland</u>	6. Total number of applications and patents involved: _3			
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Kyle Yesland</u> Internal Address: <u>Synageva BloPharma Corp.</u>	6. Total number of applications and patents involved: _3			
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Kyle Yesland</u> Internal Address: <u>Synageva BloPharma Corp.</u>	6. Total number of applications and patents involved: _3			
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Kyle Yesland</u> Internal Address: <u>Synageva BloPharma Corp.</u> Street Address: <u>111 Riverbend Road</u>	6. Total number of applications and patents involved: 3 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 120. ☐ Authorized to be charged by credit card ✓ Authorized to be charged to deposit account ☐ Enclosed ☐ None required (government interest not affecting title 8. Payment Information a. Credit Card Last 4 Numbers			
5. Name and address to whom correspondence concerning document should be mailed: Name:Kyle Yesland Internal Address:Synageva BloPharma Corp. Street Address: Street Address: 111 Riverbend Road Dity: Athens State: CA	6. Total number of applications and patents involved: 3 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 120. ☐ Authorized to be charged by credit card ✓ Authorized to be charged to deposit account ☐ Enclosed ☐ None required (government interest not affecting title 8. Payment Information			
5. Name and address to whom correspondence concerning document should be mailed: Name:Kyle Yesland Internal Address:Synageva BloPharma Corp. Street Address: Street Address: 111 Riverband Road Street Address: Dity: Athens State; State; Call Zip:30605 Phone Number:(706) 227-1170 ext. 233	6. Total number of applications and patents involved: 3 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 120. ☐ Authorized to be charged by credit card ✓ Authorized to be charged to deposit account ☐ Enclosed ☐ None required (government interest not affecting title 8. Payment Information a. Credit Card Last 4 Numbers			
5. Name and address to whom correspondence concerning document should be mailed: Name:Kyle Yesland Internal Address:Synageva BloPharma Corp. Street Address: Street Address: 111 Riverbend Road City: Athens Street: Chrone Number: (706) 227-2180	6. Total number of applications and patents involved: _3 7. Total fee (37 CFR 1.21(h) & 3.41) \$_120. Authorized to be charged by credit card ✓ Authorized to be charged to deposit account Enclosed None required (government interest not affecting title 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number _501729			
5. Name and address to whom correspondence concerning document should be mailed: Name: Kyle Yesland Internal Address: Synageva BloPharma Corp. Street Address: 111 Riverbend Road Street Address: Zip:30605 State: GA Zip:30605 Phone Number: (706) 227-1170 ext. 233 Fax Number: (706) 227-2180 Streat Address: Context State	6. Total number of applications and patents involved: 3 7. Total fee (37 CFR 1.21(h) & 3.41) \$_120. Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date			
5. Name and address to whom correspondence concerning document should be mailed: Name:Kyle Yesland Internal Address:Synageva BloPharma Corp. Street Address: State: GA Zip:30605 Shone Number: (706) 227-1170 ext. 233 Stanuard State: Stat	6. Total number of applications and patents involved: 3 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 120. □ Authorized to be charged by credit card ☑ Authorized to be charged by credit card ☑ Authorized to be charged to deposit account □ Enclosed ☑ None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number _501729			
5. Name and address to whom correspondence concerning document should be mailed: Name: Kyle Yesland Internal Address: Synageva BloPharma Corp. Street Address: 111 Riverbend Road Street Address: Zip:30605 State: GA Zip:30605 Phone Number: (706) 227-1170 ext. 233 Fax Number: (706) 227-2180 Streat Address: Context State	 6. Total number of applications and patents involved: 3 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 120. Authorized to be charged by credit card ✓ Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers			

Mail Stop Assignment Recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to; Mail Stop Assignment Recordstion Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

ASSIGNMENT

WHEREAS, the Board of Trustees of Michigan State University of East Lansing, Michigan ("ASSIGNOR"), is the owner of the entire right, title and interest in and to the patents and patent applications listed in the attached Schedule A ("MACARTHUR PATENT DOCUMENTS").

WHEREAS, Synageva Biopharma Corp, incorporated under the laws of the state of Delaware, having a place of business at 60 Hickory Drive, Waltham, MA 02451 ("ASSIGNEE"), is desirous of obtaining the entire right, title and interest in and to the MACARTHUR PATENT DOCUMENTS.

NOW, THEREFORE, in consideration of the assignment of the MACARTHUR PATENT DOCUMENTS from the ASSIGNOR TO THE ASSIGNEE, ASSIGNEE shall pay to ASSIGNOR a fec of the sent by the thirtieth (30) day from the

last party to sign this agreement ("CLOSING DATE") or this assignment is null and void. On the CLOSING DATE, provided payment is received, the ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE, its successors and assignees, the entire right, title and interest in and to the MACARTHUR PATENT DOCUMENTS, including any related applications such as continuations, divisionals, continuation-in-part applications and foreign counterparts thereto, and to the inventions therein disclosed and all rights of enforcement thereto, including all rights to sue or recover for the past, present and future infringement thereof, and any and all choices in action related thereto. ASSIGNEE may apply for and receive patents in its own name wherever so permitted by law and the ASSIGNOR shall, when requested by ASSIGNEE, use reasonable efforts to and without further compensation, execute all rightful oaths, assignments, and powers of attorney, including but not limited to the right to file and prosecute in ASSIGNEES's own name, wherever so permitted by law, patent applications, including related and corresponding applications, and to claim priority of patent applications pursuant to the Paris Convention, to the ASSIGNEE and to agents and legal representatives of the ASSIGNEE, and all other papers necessary and proper to carry out the intent and purpose of this Assignment.

ASSIGNEE shall be responsible for all costs relating to the MACARTHUR PATENT DOCUMENTS, arising after the CLOSING DATE to include, though not exhaustive, patent maintenance fees, patent filing fees, patent prosecution fees and legal fees related thereto.

ASSIGNOR retains no ownership rights in the patent applications, the patents, the inventions and the rights transferred to ASSIGNEE hereunder.

All rights not expressly granted



Page 1 of 2

to ASSIGNEE hereunder are reserved by ASSIGNOR, and both ASSIGNEE and ASSIGNOR expressly acknowledge that nothing contained herein shall be construed or interpreted as a grant of any license, but limited to the assignment of the MACARTHUR PATENT DOCUMENTS. ASSIGNOR covenants and agrees to have full right to convey the entire interest herein assigned, and to have not executed, and will not execute, any agreement in conflict herewith.

IN TESTIMONY WHEREOF, ASSIGNOR has caused this Assignment to be executed by its duly authorized officer.

IN WITNESS WHEREOF, ASSIGNOR has caused this Assignment of the MACARTHUR PATENT DOCUMENTS to be executed by its duly authorized representative on this 30th day of March, 2009.

[ASSIGNOR]

By:	N	R	Po	A
		T		

Michael R. Poterala Title: Executive Director, MSU Technologies

Date: April 6, 2009

On this _6th___ day of ____April__, 2009, before me personally appeared Michael R. Poterala, proved to me on the basis of satisfactory evidence to be the person who executed the above Assignment as Executive Director, on behalf of the Board of Trustees of Michigan State University, and acknowledged to me that the company executed it.

Tana C. Boehm, Notary Public, State of Michigan Clinton County, Acting in Ingham County

My Commission Expires: 11/29/2014

ASSIGNEE hereby acknowledges receipt of the entire right, title and interest in and to the

MACARTHUR PATENT DOCUMENTS.

[ASSIGNEE]

By <u></u>		
5	anj K. Patel	
Title	President & CEO	

Date	April 7, 2009	

Page 2 of 2

PATENT REEL: 022482 FRAME: 0996

SCHEDULE A (MACARTHUR PATENT DOCUMENTS)

Serial No	Patent No	Title	File Date	issue Date	Country	Арр Туре
		Vectors And Methods For Tissue Specific				
		Synthesis Of Protein In Eggs Of				
ZL97196343.6	ZL97196343.6	Transgenic Hens	06/06/1 9 97	02/27/2008	China	Nationalized PCT
		Vectors and Methods for Tissue Specific				
		Synthesis of Proteins in Eggs of	/ /			
PCT/US97/09889		Transgenic hens	06/06/1997	<u>N/A</u>	PCT	РСТ
		Vectors and Methods For Tissue Specific				
99106142.6		Synthesis of Protein in Eggs of Transgenic Hens	06/06/1997	Grant Notification	11 K	Manual SCT
		Vectors and Methods for Tissue Specific	00/00/1931	Grant Notification	Hong Kong	Nationalized PCT
		Synthesis of Protein in Eggs of Transgenic				
9810665		Hens	12/11/1998	Pending	Mexico	Nationalized PCT
		Vectors And Methods For Tissue Specific	12/11/1330	renang		Nacionalized PCT
]	Synthesis Of Protein In Eggs Of				
97931074.5		Transgenic Hens	06/06/1997	Published	Europe	Nationalized PCT
		Vector for expression of proteins into				
60/019.641		eggs of transgenic hens	06/12/1996	N/A	U.S	Provisional
		Replication-Defective Retroviral Vectors	00/12/1990		0.3	FIOVISIONAL
		and Methods for Tissue-Specific				
		Synthesis of Protein in Eggs of Transgenic				
333295	333295	Avians	06/06/1997	06/06/1997	N.Ż.	Nationalized PCT
		Vectors And Methods For Tissue Specific				
		Synthesis Of Protein in Eggs Of				
2,257,871		Transgenic Hens	06/06/1997	Pending	Canada	Nationalized PCT
		Tissue Specific Synthesis Of Protein In				
18302/01	769622	Eggs Of Transgenic Hens	06/06/1997	05/13/2004	Australia	Nationalized PCT
		Vectors and Methods for Tissue-Specific				
		Synthesis of Protein in Eggs of Transgenic				
12/008,399		Hens	01/09/2008	Pending	U.S.	Continuation
		A Retroviral Vector Having an Ovalburnin				
10/935,905	7,378,086	Promoter	09/08/2004	05/27/2008	U.S.	Non-Provisional
		Vectors and Methods for Tissue Specific	00,00,2004	03/2//2000		
		Synthesis of Protein in Eggs of Transgenic				
10/706,869		Hens	11/12/2003		Ų.\$.	Non-Provisional
		Vectors and Methods for Tissue Specific				
		Synthesis of Protein in Eggs of Transgenic				
10-501724		Hens	06/06/1997	Pending	Japan	Nationalized PCT
		Vectors And Methods For Tissue Specific				
		Synthesis Of Protein In Eggs Of				
08/844,175	6,825,396	Transgenic Hens	04/18/1997	11/30/2004	U.S.	Non-Provisional
		Vectors And Methods For Tissue Specific				
24700/07	776206	Synthesis Of Protein In Eggs Of				
34799/97	726386	Transgenic Hens	06/06/1997	02/15/2001	Australia	Nationalized PCT
		Transgenic Avlans Containing				
		Replication-Defective Retroviral Vectors				
503901	503901	and Methods for Tissue-Specific			1.	
	702501	Synthesis of Proteins	06/06/1997	12/17/2001	N.Z.	Nationalized PCT

ASSIGNOR Initials <u>r</u>ff

ASSIGNEE Initials



PATENT REEL: 022482 FRAME: 0997

RECORDED: 04/08/2009