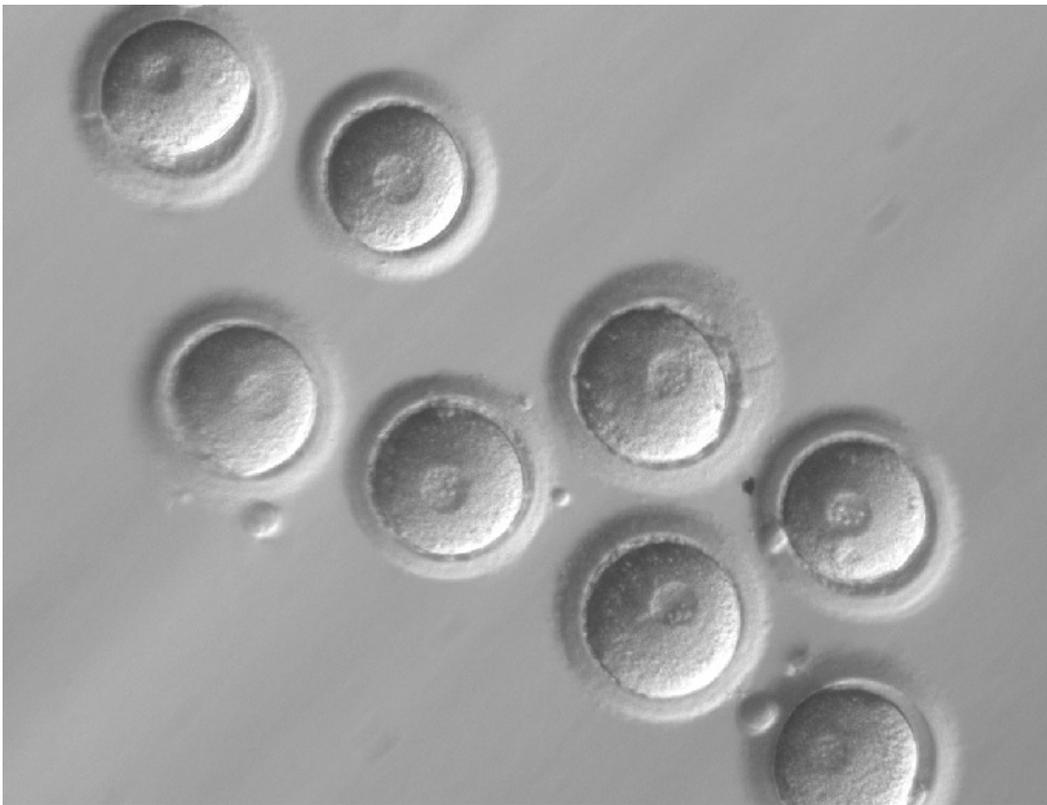


# Collins Medical Trust

Medical Research and Education in Oregon

## 2013 Annual Report



Several early-stage egg cells following Somatic Cell Nuclear Transfer

# Collins Medical Trust

## 2013 Annual Report

### Purpose and History

“The principal and income of the trust fund shall be used (a) to aid, further, promote, develop, encourage and sponsor research, experiment and work in the cause, cure and treatment of human diseases or in any field of medical research, and (b) to aid, further and promote medical education.”

The Collins Medical Trust was founded by Truman Collins Sr. in the fall of 1956. He was interested in the medical field and wanted to set up a trust that would contribute to medical research and education taking place in Oregon. Contributions were made to the trust over the next ten years or so, and its assets have grown significantly since that time, largely due to the wise investment decisions of the financial adviser, Jim Miller, over the first forty years of the Trust’s existence.

Because the Trust makes relatively small grants—typically in the \$15,000 to \$30,000 range—our focus for research has primarily been seed funding for projects that, if successful, will go on to apply to the NIH or to other large funders for later-stage funding. We also like to support researchers at a stage where they are gaining their independence in a supportive environment.

Since its inception, the Collins Medical Trust has made grants totaling about \$8.6 million.

### Trustees and Staff

Nancy Helseth: Administrator (1993 – present)  
 Truman Collins Jr.: Trustee (1990 – present)  
 Dr. Elizabeth Eckstrom: Trustee (2003 – present)  
 Dr. Walter McDonald: Trustee (2005 – present)  
 Timothy Bishop: Treasurer (1990 – present)

### Financial Statements (Fiscal year ending September 30, 2013)<sup>1</sup>

Assets and Liabilities			Revenue and Expenses		
Assets:	2013	2012	Income:	2013	2012
Cash	\$431,000	\$853,000	Income (interest & dividends)	\$205,000	\$214,000
Stocks	\$7,760,000	\$6,588,000	Realized gains	\$169,000	\$165,000
Total assets	\$8,191,000	\$7,441,000	Unrealized gains	\$807,000	\$1,117,000
			Total income	\$1,181,000	\$1,496,000
Liabilities	(\$40,000)	(\$40,000)	Taxes & investment expense	(\$4,000)	(\$8,000)
Net Assets	\$8,151,000	\$7,401,000	Net Investment Income	\$1,177,000	\$1,488,000
			Grants - net	(\$427,000)	(\$347,000)
			Net revenue	\$750,000	\$1,141,000

<sup>1</sup>Rounded to the nearest thousandth.

## 2013 Grants (October 1, 2012 – September 30, 2013)

### Research

**\$30,000 — OHSU Foundation — Alain Silk, Ph.D.**

“Repairing Defective Transcriptional Networks to Inhibit Cancer Progression

**\$29,996 — OHSU Foundation — Jing Xu, Ph.D.**

Anti-Muüllerian Hormone in Primate Follicular Development and Fertility Preservation

**\$30,000 — OHSU Foundation — Ningning Zhao, Ph.D.**

The Role of ZIP14 in HFE related Hemochromatosis

**\$29,910 — Portland State University — Marilyn R. Mackiewicz, Ph.D.**

Lipid-Coated Gold Nanoparticles for Detecting and Studying the Effects of Beta Amyloid Conformers on Membrane Integrity

**\$30,000 — OHSU Foundation — Christine M. Ackerman, Ph.D.**

Mining the riches of whole exome data to identify the genetic basis of congenital heart disease

**\$29,872 — OHSU Foundation — Summer L. Gibbs, Ph.D.**

Synthesis of Small Molecule Fluorophores to Probe Pancreatic Cancer Margins in the Operating Room

**\$30,000 — OHSU Foundation — Ellen M. Langer, Ph.D.**

Modeling tumor tissue to predict tumor phenotype and response to treatment

**\$30,000 — Portland State University — Rahul Raghavan Ph.D.**

Characterization of non-coding RNAs that promote *Cosيلة burnetii* infection of human macrophages

**\$29,760 — OHSU Foundation — Frances Rena Bahjat, Ph.D.**

Stem Cell Therapy for Stroke: Does Gender Matter?

**\$30,000 — OHSU Foundation — Kimberly E. Beatty, Ph.D.**

Elucidating the Role of Mycobacterial Esterases and Lipases in Tuberculosis Using Small Molecule Probes

**\$30,000 — OHSU Foundation — Lance A. Johnson, Ph.D.**

Diet-induced obesity, ApoE and cognitive dysfunction

**\$30,000 — OHSU Foundation — Eunju Kang, D.V.M, Ph.D.**

Genetic, epigenetic and transcriptional signatures of human pluripotent stem cells

**Total Research: \$359,538 (84%)**

## Education

### **\$70,000 — Linfield School of Nursing**

Paquet Scholarship Fund, Half for Endowment and Half for Current Scholarships. The fund awarded 32 scholarships this year totaling \$32,500.

**Total Education: \$70,000 (16%)**

**Total Grants approved in 2013: \$429,538**

## Illustrative Prior Grant Recipients — Text Supplied by OHSU

It may take years before the outcome of a research project is fully known. The following reports provide some additional context for two of our prior grants. The work from Dr. Grigsby was highlighted in our last annual report, but there have been some further exciting developments. Summaries were provided by OHSU.

### **Genetic, Epigenetic and Transcriptional Signatures of Human Pluripotent Stem Cells**

Eunju Kang, DVM, Ph.D., Postdoctoral Researcher, Reproductive & Developmental Sciences  
Oregon Health Sciences University \$30,000 awarded in September 2013

In May 2013, the regenerative medicine community celebrated a breakthrough from Dr. Shoukhrat Mitalipov's laboratory at OHSU, in which Dr. Eunju Kang is a postdoctoral researcher. The breakthrough was published in the prestigious journal *Cell* and described an entirely new approach to creating human embryonic stem cells with the potential to cure a number of diseases. The Mitalipov lab was the first in the world to accomplish this through the successful use of somatic cell nuclear transfer (SCNT), a technique that may have significant advantages over today's prevailing alternative, the induced pluripotent stem cell (iPSC) method. The breakthrough was heralded as one of the year's top 10 scientific discoveries in *Time*, *Nature*, *National Geographic*, *Science* and *Discover*.

Specifically, the Collins Medical Trust provided funding to Dr. Kang for a project to characterize and directly compare unique, patient-specific stem cell lines derived by both methods (SCNT and iPSC) from skin fibroblasts obtained from an amyotrophic lateral sclerosis (ALS) patient. The highly anticipated results of this study will help the scientific community understand which of these approaches will be best for therapeutic results. The project supported by the Collins Medical Trust and the work in the Mitalipov lab could drastically help accelerate treatment for ALS and other devastating health conditions such as cardiovascular disease, spinal cord injury, Parkinson's, Alzheimer's and diabetes.

## **Primate Model of Ureaplasma Infection in utero: Prevention of Neurologic Sequelae**

Peta L. Grigsby, Ph.D., Assistant Scientist, Division of Reproductive Sciences,  
ONPRC Assistant Research Professor, Obstetrics and Gynecology  
Oregon Health Sciences University \$29,652 awarded in September 2009

After completing our pilot studies that were funded by the CMT, we were successful in securing extramural funding from the National Institute of Child Health & Human Development (NICHD) in 2012. Since then we have continued to expand our Special Care Nursery (SCN) facilities and research personnel. The SCN is a 5-bed unit equipped with 2 ventilators with central O<sub>2</sub>, air and suction lines. In addition we have been able to purchase a Radiant warmer equipped with its own O<sub>2</sub>, air and suction supply. This has enabled us to safely transport our critical newborns not only from the delivery suites, but also when imaging procedures are needed (i.e., radiographs, MRI).

To date, we have successfully cared for 10 infants (including our pilot study) and have made tremendous headway in our ability to survive these very immature and sick neonates. We recently gained National & International interest in our work when Dr. Grigsby was invited to present a Keynote Symposium at the 8<sup>th</sup> World Congress on Developmental Origins of Health and Disease (Nov 2013). The ONPRC is now recognized as the only primate research facility in the world with the resources and expertise to run an intensive care nursery such as ours, all thanks to the initial funding from the CMT.

Remarkably, our greatest achievement this year has been the survival of our smallest infants at 270–300g (term=500g). One of these infants was infected with Ureaplasma *in utero* for 20 days before delivery and was subsequently born with mild-to-severe respiratory distress and pneumonia (similar to human babies). Ultimately mechanical ventilation was required for his survival (intubation & surfactant therapy). Within 12hrs we were able to successfully wean the infant off the ventilator, treat his pneumonia and he is now 4 months old and gaining weight steadily. Moreover, our novel antibiotic treatment protocol for Ureaplasma infection *prior* to birth has consistently resulted in healthier and less immature infants. Our preliminary data also suggests that cognitive and behavioral development in these infants is improved. To our knowledge, we are the first group to achieve this in a non-human primate model. Without doubt, this has positioned us at the forefront of making a true impact in maternal-fetal and neonatal care.

Equally rewarding was our expanded involvement in ONPRC colony management. In the Spring of 2013 during the height of baby season, a female infant was found abandoned in one of the outdoor shelter houses. At 240g, she was the smallest live infant to be admitted into the colony hospital. Not knowing how to care for this tiny little one, Veterinary staff enlisted our help. Despite her small stature, “Polly” was one feisty little girl with the determination to survive. Today at 9 months old, Polly is happy, healthy and has found her place as “big sister” to all our preterm neonates.

Now in our second year of NICHD funding, we have much planned on the horizon. We have an additional 10 pregnancies/infants coming through our nursery in 2014. We are expanding our research objectives to include pulmonary function testing, and we are currently collecting preliminary data for a new RO1 grant submission for February 2014. We have also received interest from other research groups here at ONPRC to collaborate and utilize our SCN facilities, in particular with Dr. Kathy Grant (Neuroscience) and her studies on Fetal Alcohol Syndrome.

## Policies and Procedures

The Collins Medical Trust was established in 1956 by Truman W. Collins as a tax-exempt charitable trust under the laws of the State of Oregon. It is recognized by the Internal Revenue Service as tax-exempt under Section 501(c)(3) of the Internal Revenue Code and has been classified as a private foundation under Section 509(a) of the Code. The Trust is directed by a Board of Trustees.

### Policies

The Original Trust document states that monies from the Trust shall be used:

“To aid, further, promote, develop, encourage and sponsor research, experiment and work in the cause, cure and treatment of human disease or in any field of medical research, and

To aid, further and promote medical education.”

With this statement as a guide, and having knowledge of the desires and concerns of the Trustor, Mr. Collins, and applicable laws, the Trustees over the ensuing years have established the following *general guidelines* under which grant requests are considered:

1. Disbursements are made only to organizations which have established their tax-exempt status with the U.S. Treasury Department and are operated exclusively for scientific and/or educational purposes.
2. Preference is given to projects and programs conducted by qualified organizations within the State of Oregon.
3. Funds cannot be paid directly to or for the benefit of any specific individual. This does not preclude grants to qualified institutions for organized scholarship programs. Education is generally geared toward the education of health care professionals.
4. Grants for annual operating budgets or for deficit financing are not favored.
5. Disbursements are normally not made to “Private Foundations”, as defined in the Internal Revenue Code.
6. The Trust will not support efforts to influence legislation or other political action.
7. In considering projects or programs involving substantial funds, the Trust prefers to participate with other donors and expects the applicant to seek additional support.

Preference is given to projects or proposals where the researcher/investigator is newly embarking on their research career and is clearly supported by their respective mentor(s).

## Submission Procedures

Requests for information and applications for grants from the Collins Medical Trust should be presented in writing. Applications need not be formal and should include an Executive Summary suitably brief to present the necessary facts about the applying organization and the project for which the grant is being sought, supported by sufficient technical detail to present a clear picture of the project and expected outcomes. Project outcomes should be clearly articulated, along with an evaluation plan that will determine how successful the project was in attaining its objectives.

The application should include (If the Trustees believe further information is required, they may request an interview with a principal of the applicant and/or a visit to the applicant's facility):

1. The exact name of the organization or agency making application, and the specific date when requested funds will be required.
2. A copy of the letter from the Treasury Department of the United States which grants tax exempt status; also a statement that the applicant is classified as "Not a Private Foundation", as defined in the Internal Revenue Code.
3. The nature of the project for which funds are requested. Projects seeking funding for symposiums, seminars or conferences should contain details regarding course evaluations.
4. Curriculum vitae of the investigator(s). NIH format is preferred.
5. Junior investigators should identify and provide evidence of an established mentor relationship as well as submit a letter of support from their primary mentor(s).
6. MD's should substantiate 'protected' time for research.
7. Bibliography supporting the project.
8. In research projects involving human subjects, the status of IRB approval should be included.
9. A budget for the proposed project.
10. Estimated total of funds required for the proposed project and the amount sought from the Collins Medical Trust.
11. Anticipated source of balance required in excess of funds requested from the Collins Medical Trust.
12. Other sources being approached for financial assistance for the project.

Electronic submission (preferred): via email to [nhelseth@collinsmedicaltrust.org](mailto:nhelseth@collinsmedicaltrust.org) (.pdf format preferred).

Hard copy submission: Submit the *original and 1 photocopy* of the proposal (including any supporting documentation). Mail to:

Nancy L. Helseth, Administrator  
Collins Medical Trust  
1618 S.W. First Avenue, Suite 500  
Portland, OR 97201

(503) 471-2223  
[nhelseth@collinsmedicaltrust.org](mailto:nhelseth@collinsmedicaltrust.org)  
<http://www.collinsmedicaltrust.org/>

**Replies to Applications:**

The Trustees meet *three times a year*, in January, May and September. Requests should be submitted by the *last business day of the month preceding* these months to receive timely consideration. It is not possible to react to emergency requests for crash programs. When an application has finally been acted upon by the Trustees, it will be accepted or rejected in writing sent to the mailing address of the applicant by the first week in the following month.

**Reports:**

The organization receiving a grant from the **Collins Medical Trust** has a responsibility to report on the use of the funds granted. Unless otherwise indicated at the time disbursement is made, reports are requested to be made annually until the entire grant has been expended and the full impact of the grant is realized. These reports should cover not only progress, but also evaluate the results being achieved. Additionally, throughout the duration of the project, any substantial changes in scope, personnel, or funds that are re-directed from the original purpose, should be reported to the Administrator of the Collins Medical Trust for approval by the Trustees at their next regularly scheduled meeting. Lastly, the Collins Medical Trust appreciates acknowledgment, primarily in scientific publications, for their contribution in support of the project.

## Trustee Biographies

### **Walter J. McDonald, M.D., M.A.C.P.**

Walter received his undergraduate education at Williams College and his MD degree at the University of Michigan. Following a residency in internal medicine at Oregon Health Sciences University, he returned to Michigan for training in Endocrinology. He is certified in both internal medicine and endocrinology.

Walter was the Chief of Medicine at the Portland Oregon VA Medical Center for 12 years beginning in 1979. He then assumed the role of Associate Dean for Education at the Oregon Health Sciences University. In 1995 he became the CEO of the American College of Physicians. In 2002 he assumed the role of CEO of the Council of Medical Specialty Societies, a position he held until 2008.

Walter is the vice president for QHC Advisory, a consulting firm based in New York.

He is a member of Alpha Omega Alpha and has been elected as a Master of the ACP. He has been recognized by Oregon Health Sciences University as Alumnus of the Year (1998) and has been recognized by a number of organizations for both his teaching and leadership skills.

His primary interests include quality improvement, continuing and graduate medical education, and professionalism.

### **Elizabeth Eckstrom, M.D., M.P.H.**

Elizabeth is a geriatrician who specializes in promoting a healthy lifestyle in older adults and in educating all health professionals to be competent in the care of older adults. She is Director of Geriatrics at Oregon Health & Science University in Portland, Oregon, and Associate Professor of Medicine. She Co-Directs OHSU's Healthy Aging Alliance, and is Principle Investigator of the Oregon Geriatric Education Center.

Her research has focused on interprofessional education, tai chi to improve health in older adults, and falls prevention. She also studies the effectiveness of training primary care faculty in geriatrics, and speaks regionally and nationally on strategies to optimally care for older patients in primary care practice.

Personal interests include travel, windsurfing, telemark skiing, gardening, and reading.

### **Truman W. Collins, Jr.**

Truman is the son of the founder of the Collins Medical Trust (Truman W. Collins, Sr.), and has been a trustee since 1990. Truman earned his undergraduate degree from Willamette University in 1986 and his Master's degree in Computer Science from Stanford University in 1987.

In addition to serving as Trustee of the Collins Medical Trust, Truman is the President of The Collins Foundation, and a board member of The Collins Companies. He serves as a trustee of the OHSU Foundation, a trustee of Willamette University, and is a board member of The Chalkboard Project—an initiative of Foundations for a Better Oregon.

Truman also works part-time as a software engineer for Mentor Graphics Corporation in the area of Computer Aided Engineering software, used for the design and fabrication of integrated circuits.

Cover photo: Shown here are several early-stage egg cells following Somatic Cell Nuclear Transfer created in Dr. Shoukhrat Mitalipov's laboratory at OHSU.

Photo courtesy of OHSU

Design and typesetting: Truman W. Collins Jr.