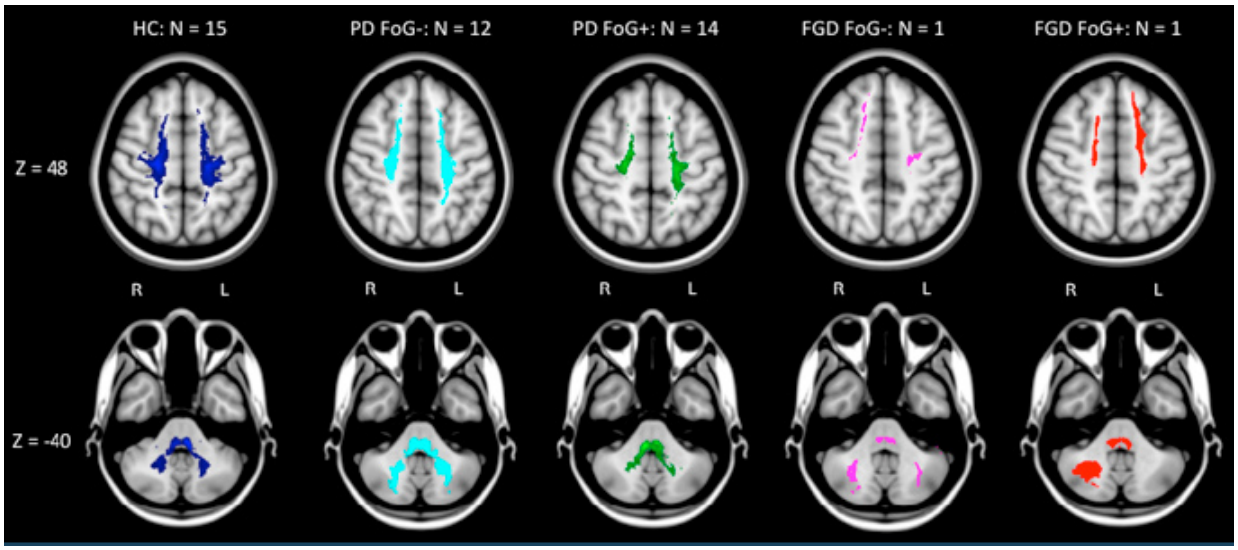
Collins Medical Trust

Medical Research and Education in Oregon

2015 Annual Report



Structural Connectivity of the Locomotive Circuit in Parkinson's Disease Patients

Founded by Truman W. Collins, Sr. in 1956

Collins Medical Trust
2015 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 $9.7 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, 2015)**[1]

Assets and Liabilities

Assets:	2015	2014
Cash	$387,000	$516,000
Stocks	$6,909,000	$8,153,000
Total assets	$7,296,000	$8,669,000
Liabilities	($36,000)	($50,000)
Net Assets	$7,260,000	$8,619,000

Revenue and Expenses

Income:	2015	2014
Income (interest & dividends)	$229,000	$229,000
Realized gains	$2,000	$164,000
Unrealized gains	($1,109,000)	$583,000
Total income	($878,000)	$976,000
Taxes & investment expense	($2,000)	($4,000)
Net Investment Income	($881,000)	$972,000
Grants - net	($477,000)	($503,000)
Net revenue	($1,358,000)	$469,000

[1] Rounded to the nearest thousand.

2015 Grants (October 1, 2014 – September 30, 2015)

Research

Leslie Devaud, Ph.D. **Pacific University** **$30,000**
Establishment of a zebrafish colony at Pacific University to promote biomedical research in a vertebrate animal model system

Viviana I. Perez, Ph.D. **Oregon State University** **$30,000**
Rapamycin as a novel preventative compound to inhibit cancer development

Kristina H. Young, M.D., Ph.D. **Providence Portland Medical Foundation** **$30,000**
Optimization of the Immune Response with Targeted Radiation Therapy for Rectal Cancer

Shanta Boddapati, Ph.D. **OHSU Foundation** **$30,000**
Anti-metastasis therapy for PTEN mutant breast cancer

Kim-Hien Dao, D.O. Ph.D. **OHSU Foundation** **$30,000**
Defining the frequency of mutations in genes associated with hematologic malignancies in health older female subjects

Shelly S. Mason, Ph.D. **OHSU Foundation** **$30,000**
The Role of Transferrin Receptor-2 in Regulating the homeostatic Balance Between Iron and Erythropoietic Requirements

Evelyn McClendon, Ph.D. **OHSU Foundation** **$30,000**
Novel Causes of Learning Disabilities in Survivors of Preterm Birth

Eric D. Cambronne, Ph.D. **OHSU Foundation** **$30,000**
In vivo infection models using protozoan-primed *Legionella*

Lisa Karstens, Ph.D. M.B.I. **OHSU Foundation** **$29,662**
Do urinary bacterial communities play a role in overactive bladder syndrome?

Phoebe Lin, M.D., Ph.D. **OHSU Foundation** **$30,000**
Modulating the gut microbiota to treat autoimmune uveitis

Lucia Carbone, Ph.D. **OHSU Foundation** **$29,956.49**
The landscape of somatic mosaicism in non-human primate brain

James Zhi Chen, Ph.D. **OHSU Foundation** **$30,000**
Structure Elucidation of MRP1 by Single-Particle Electron Microscopy

Gwendolyn McGinnis, M.D. **OHSU Foundation** **$30,000**
Immune and radiation cancer therapy: neuroinflammatory, behavioral, and cognitive consequences

Vivek K. Unni M.D., Ph.D. **OHSU Foundation** **$30,000**
Advanced Ultrastructural Imaging Approaches to Studying Programmed Cell Death in Parkinson's Disease

Total Research: **$419,618.49 (88%)**

Education

Linfield School of Nursing **$55,000**
Paquet Scholarship Fund, Half for Endowment and Half for Current Scholarships. The fund awarded 28 scholarships this year totaling $65,750.

Total Education: **$55,000 (12%)**

Total Grants Approved in 2015: $474,618

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. Although these grants were made fairly recently, they have lead to notable funding and discoveries. Summaries were provided by OHSU.

Neural Mechanisms Underlying Freezing of Gait Resulting from Parkinsonism
Brett W. Fling, Ph.D.
Oregon Health & Science University
$30,000 awarded in September 2014

Balance and gait are impaired in the majority of older people, especially those with age-related, neurological degeneration such as parkinsonism. In recent years, it has become clear that mobility dysfunction in people with parkinsonism is also heavily influenced by cognitive impairment. In addition to idiopathic Parkinson's disease (PD), a large number of older adults with parkinsonism syndromes experience mobility unsteadiness and substantial cognitive impairment, often termed frontal gait disorders (FGD). Research suggests that disruption of communication between the right and left sides of the brain has a substantial impact on mobility and cognitive performance. This communication is principally possible due to the corpus callosum, the largest region of white matter in the brain, which connects the right and left hemispheres. Our work in 2015 supported by the Collins Medical Trust studied the integrity of white matter fiber tracts within the corpus callosum in people with FGD and idiopathic PD and related integrity of these fibers with clinical and objective measures of mobility and cognition in people with parkinsonism. We collected data on 60+ participants with idiopathic PD, 15 people with FGD and over 30 age-matched, healthy control participants. Our exciting results indicate that people with FGD display poorer cognitive performance and a slower, wider-based gait in comparison to those with PD. Further, in those people with FGD, gait and cognitive deficits were specifically related to circuitry employing the anterior portion of the callosum, but not in those with PD. These results highlight the important gait and balance contributions of communication between regions of the brain that have historically been considered important only for cognitive tasks in neurological patients with cognitive dysfunction.

The research referenced here resulted in a number of international presentations including at the 1) Organization for Human Brain Mapping and 2) the International Congress of Parkinson's Disease and Movement Disorders. We have already submitted our first manuscript detailing this novel work to NeuroImage: Clinical *Associations between mobility, cognition and callosal integrity in people with Parkinsonism*, and have also leveraged our Collins Medical Trust-supported data to acquire multiple lines of additional funding from the National Institutes of Health as well as the first Pilot Project grant awarded by the Parkinson Center of Oregon in late 2015. Our novel results have also propelled and strengthened our current physical therapy-based neurorehabilitation research in those with PD and FGD. We are conducting an on-going randomized control trial to determine the effectiveness of cognitively-based physical therapy by updating our successful Agility Boot Camp program to also incorporate cognitive challenges.

Defining the Frequency of Mutations in Genes Associated with Hematologic Malignancies in Healthy Older Female Subjects
Kim-Hien Dao, D.O., Ph.D.
Oregon Health & Science University
$30,000 awarded in January 2015

The main objective of this project was to sample the frequency of clonal hematopoiesis (skewed blood production) and somatic mutations in blood cells of normal older women—these are known markers of increased risk for blood cancer (myelodysplasia and acute myeloid leukemia) and cardiovascular events including death. The successful completion of this project resulted in data needed to design the next study, which involves screening many thousands of women in Oregon using the same methodologies that were validated in this project. We confirmed what we expected. By using the *HUMARA* assay, we can enrich for those subjects carrying mutations in genes that drive blood cancer and cardiovascular events. We found a ~15% incidence of mutations in women displaying clonal hematopoiesis versus ~0% incidence of mutations in women without this feature. This level of enrichment will help us identify those subjects at high risk for these often fatal diseases. This project helped us design the next study (IRB protocol under review) with a long term goal towards establishing a first-of-a-kind, successful early detection and primary prevention strategy in blood cancer and cardiovascular events. We hope that our work will lead to a new paradigm in molecular testing and risk modification. With this data, we have secured additional federal and private grants to support our work.

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 (.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
29100 S.W. Town Center Loop, Suite 300
Wilsonville, OR 97070
(503) 826-5223
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

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.

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.

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 Willamette University, and is a board member of Foundations for Better Oregon.

Cover photo: Shown here are axial views of structural connectivity of the locomotor circuit (assessed by probabilistic tractography) in patients with various combinations of Parkinson's disease and frontal gait disorder. These were taken in Dr. Brett Fling's laboratory at OHSU.

Image courtesy of OHSU.

Design and typesetting: Truman W. Collins Jr.