Are you participating in any other research studies? _____ Yes _____No

INTRODUCTION TO RESEARCH STUDIES

This study is about healthy aging, lifestyles and frailty. We wish to follow individuals at various settings over time to discover factors that might be associated with good and poor health outcomes. We expect to find out factors that can be modified so that the poor outcomes associated with aging and disease may be prevented and the health of the population be improved.

Being in a research study is different from being a patient. When you are a patient, you and your doctor have a great deal of freedom in making decisions about your health care. When you are a research participant, the Protocol Director and the research staff will follow the rules of the research study (protocol) as closely as possible, without compromising your health.

PURPOSE OF RESEARCH

You are invited to participate in a research study of general health well being, disease, disability, frailty and their consequences in your life. We hope to learn 1) why people become frail, disabled or develop diseases 2) Why some people have extraordinary physical performance. You were selected as a possible participant in this study because you may be willing to participate, and can provide legally valid consent.

Your participation in this study is entirely voluntary.

Your decision whether or not to participate will not prejudice you or your medical care. If you decide to participate, you are free to withdraw your consent, and to discontinue participation at any time without prejudice to you or effect on your medical care. If you decide to terminate your participation in this study, you should notify Dr. Eswar Krishnan MD at 650-725-8004.

This research study is looking for 750 participants with or without any disease. Currently the enrolment is limited to California.
DURATION OF STUDY INVOLVEMENT

Each research study visit, both the initial visit and subsequent annual visits, is expected to take no more than 60 minutes of your time. You will be invited for follow up for 10 years in the future.

PROCEDURES

If you choose to participate, Dr Krishnan and his research study staff will invite you to complete the paper forms and subsequently provide fasting sample of blood (4 Table spoons). You will also be asked to provide permission to obtain and examine your medical records. Subsequently, on an annual basis, you will be asked to complete questionnaires and provide blood samples. The questionnaires will provide us information about your health status, medical records will help confirm the diagnoses and blood samples will enable performance of special blood tests that may be useful to perform research on your health condition.

This study DOES not involve taking medications or any requirement to change your lifestyle.

Your samples may be sent outside of Stanford for analysis.

Tissue Sampling for Future Research

Research using tissues is an important way to try to understand human disease. You have been given this information because the investigators want to include your tissues in a research project and because they want to save the samples for future research. There are several things you should know before allowing your tissues to be studied.

Your blood will be first spun in a centrifuge and the components separated (red blood cells, white blood cells). These will be stored in deep freezer. The body fluid sample container will be labeled with a bar code or similar label that will not have any direct identifiers, diagnosis, age etc. but only a dummy code. The investigator will have the key to this dummy code number that will enable linkage of the sample to other aspects of the information that you provide but not those items that can be used to link you with a specific sample. Because your samples will not be linked to your name after they are stored, you cannot withdraw your consent to the use of the samples after they are taken.

You will be told the results of only those tests that are part of standard medical care (e.g. blood count), but you will not be told the results of the research tests, including any future research tests.
Any tissues you have donated which are used in research may result in new products, tests or discoveries. In some instances, these may have potential commercial value and may be developed and owned by the Investigators, Stanford University and/or others. However, donors of tissues do not retain any property rights to the materials. Therefore, you would not share in any financial benefits from these products, tests or discoveries.

_____ I consent to my samples being saved for future research

_____ I do not consent to my samples being saved for future research

Tissue Sampling for Genetic Testing

As part of the analysis on your samples, the investigators may do genetic testing. Genetic research is research that studies genes, including gene characteristics and gene versions that are transmitted by parents to children. Genetic research may include looking at information, such as personal appearance and biochemistry, gene sequences, genetic landmarks, individual and family medical histories, reaction to medications and responses to treatment. Genetic research raises certain questions about informing you of any results. Possible risks of knowing results include: anxiety; other psychological distress; and the possibility of insurance and job discrimination. A possible risk of not knowing includes being unaware of the need for treatment. These risks can change depending on the results of the research and whether there is a treatment or cure for a particular disease.

Sometimes patients have been required to furnish information from genetic testing for health insurance, life insurance, and/or a job. A Federal law, the Genetic Information Nondiscrimination Act of 2008 (GINA), generally makes it illegal for health insurance companies, group health plans, and employers with 15 or more employees to discriminate against you based on your genetic information.

The results of the genetic study of your samples from this project will be used for research purposes only, and you will not be told the results of the tests, unless you make a specific request for it.

If you are re-contacted and want to know what the investigators have learned about your tissue samples, you should understand the following:

- The information may be too limited to give you particular details or consequences;
- You may be determined to carry a gene for a particular disease that can be treated;
• You may be determined to carry a gene for a particular disease for which there is no current treatment;
• You carry a gene for a disease and might consider informing relatives that they, too, might carry the gene.

PARTICIPANT RESPONSIBILITIES

As a participant, your responsibilities include:
• Follow the instructions of the Protocol Director and study staff.
• Keep your study appointments. If it is necessary to miss an appointment, please contact the Protocol Director or research study staff to reschedule as soon as you know you will miss the appointment.
• Tell the Protocol Director or research study staff about any active medical problems, drug side effects, doctor visits, or hospitalizations that you may have.
• Tell the Protocol Director or research staff if you believe you might be pregnant or gotten your partner pregnant.
• Complete your questionnaires as instructed.
• Ask questions as you think of them.
• Tell the Protocol Director or research staff if you change your mind about staying in the study.

While participating in this research study, you should not take part in any other research project without approval from the Protocol Directors of each study. This is to protect you from possible injury arising from such things as extra blood drawing.

WITHDRAWAL FROM STUDY

If you first agree to participate and then you change your mind, you are free to withdraw your consent and discontinue your participation at any time. Your decision will not affect your ability to receive medical care for your disease and you will not lose any benefits to which you would otherwise be entitled.

Please call the principal investigator to request a closeout form in order to discontinue from the study. You may instead opt to send a signed letter or fax to the Principal Investigator. E-mail communication will NOT be sufficient.

The Protocol Director may also withdraw you from the study without your consent for one or more of the following reasons:

• Failure to follow the instructions of the Protocol Director and study staff.
The Protocol Director decides that continuing your participation could be harmful to you.
- Pregnancy
- You need treatment not allowed in the study.
- The study is cancelled.
- Other administrative reasons.
- Unanticipated circumstances.

POSSIBLE RISKS, DISCOMFORTS, AND INCONVENIENCES

There are risks, discomforts, and inconveniences associated with any research study. These deserve careful thought. You should talk with the Protocol Director if you have any questions.

The main inconvenience of this study will be the time requirement (no more than 60 minutes) to complete the questionnaires. The only meaningful discomfort/risk involves the phlebotomy process when there will be momentary pain and there will be a very small risk for uncontrollable bleeding, ulceration, chronic pain and infections.

POTENTIAL BENEFITS

There are no foreseeable benefits for you in participating in this study aside from the satisfaction that you will be helping the cause of medical research for the benefit of humanity.

WE CANNOT AND DO NOT GUARANTEE OR PROMISE THAT YOU WILL RECEIVE ANY BENEFITS FROM THIS STUDY.

ALTERNATIVES

Participating in this research is entirely voluntary. The alternative is not participating— an option that is unlikely to harm you in anyway.

PARTICIPANT’S RIGHTS

You should not feel obligated to agree to participate. Your questions should be answered clearly and to your satisfaction.

If you decide not to participate, tell the Protocol Director. You will still receive care for your disease and will not lose any benefits to which you would otherwise be entitled.
You will be told of any important new information that is learned during the course of this research study, which might affect your condition or your willingness to continue participation in this study.

**CONFIDENTIALITY**

Your identity will be kept as confidential as possible as required by law. Except as required by law, you will not be identified by name, social security number, address, telephone number, or any other direct personal identifier. Your research records may be disclosed outside of Stanford, but in this case, you will be identified only by a unique code number. Information about the code will be kept in a secure location and access limited to research study personnel.

The results of this research study may be presented at scientific or medical meetings or published in scientific journals. However, your identity will not be disclosed.

Patient information may be provided to Federal and other regulatory agencies as required. The Food and Drug Administration (FDA), for example, may inspect research records and learn your identity if this study falls within its jurisdiction.

**Authorization to Use Your Health Information for Research Purposes**

Because information about you and your health is personal and private, it generally cannot be used in this research study without your written authorization. If you sign this form, it will provide that authorization. The form is intended to inform you about how your health information will be used or disclosed in the study. Your information will only be used in accordance with this authorization form and the informed consent form and as required or allowed by law. Please read it carefully before signing it.

**What is the purpose of this research study and how will my health information be utilized in the study?**

This is a longitudinal observational study of health outcomes. Your medical record will be used a) to validate the medications and diagnoses you report in the questionnaires b) to watch out for the appearance of any health related issues such as new diagnoses, and risk factors.
Do I have to sign this authorization form?
You do not have to sign this authorization form. But if you do not, you will not be able to participate in this research study. Signing the form is not a condition for receiving any medical care outside the study.

If I sign, can I revoke it or withdraw from the research later?
If you decide to participate, you are free to withdraw your authorization regarding the use and disclosure of your health information (and to discontinue any other participation in the study) at any time. After any revocation, your health information will no longer be used or disclosed in the study, except to the extent that the law allows us to continue using your information (e.g., necessary to maintain integrity of research). If you wish to revoke your authorization for the research use or disclosure of your health information in this study, you must write to:

Eswar Krishnan MD
1000 Welch Road, Suite 203
Palo Alto CA 94304

What Personal Information Will Be Used or Disclosed?
Your health information related to this study, may be used or disclosed in connection with this research study, including, but not limited to, information relating to a particular medical condition, medication, specific blood tests, specific physical examination measures, specific x-rays or MRI imaging information.

Who May Use or Disclose the Information?
The following parties are authorized to use and/or disclose your health information in connection with this research study:

- The Protocol Director (Eswar Krishnan MD)
- The Stanford University Administrative Panel on Human Subjects in Medical Research and any other unit of Stanford University as necessary
- Research Staff
- Stanford Medical Center staff related to this study
Who May Receive or Use the Information?
The parties listed in the preceding paragraph may disclose your health information to the following persons and organizations for their use in connection with this research study:

- The Office for Human Research Protections in the U.S. Department of Health and Human Services
- Research Staff
- Funding agency or collaborators (National Institutes of Health, Food and Drug Administration, outside data analysts). Data may also be disseminated in a de-identified format for purposes of research only.

Your information may be re-disclosed by the recipients described above, if they are not required by law to protect the privacy of the information.

When will my authorization expire?
Your authorization for the use and/or disclosure of your health information will expire on January 1, 2075.

Will access to my medical record be limited during the study?
To maintain the integrity of this research study, you may not have access to any health information developed as part of this study until it is completed. At that point, you would have access to such health information if it was used to make a medical or billing decision about you (e.g., if included in your official medical record).

___________________  __________________
Signature of Participant  Date

FINANCIAL CONSIDERATIONS

Payment
You will be paid an amount of $30 in the form of a check or gift card for each research visit.
Payments may only be made to U.S. citizens, legal resident aliens, and those who have a work eligible visa.

Costs
There is no cost to you for participating in this study.

If you participate in this study, there may be additional costs to you. These include the personal time it will take to come to all of the study visits.

The study will pay for those services, supplies, procedures, and care associated with this study that are not a part of your routine medical care. If you would like to review the list of such covered services, supplies, procedures and care, please tell us now or at any time during the study.

Participation in this study is not a substitute for health insurance. You and/or your health insurance must pay for those services, supplies, procedures, and care that you require during this study for routine medical care. You will be responsible for any co-payments and/or deductibles as required by your insurance.

Sponsor
National Institutes of Health is providing financial support and/or material for this study.

Consultative or Financial Relationships
Dr Krishnan is a paid consultant to the following companies: Takeda Pharmaceuticals International, Savient Pharmaceuticals, UCB Pharmaceuticals. However these entities are not linked with the current study.

COMPENSATION for Research-Related Injury

All forms of medical diagnosis and treatment – whether routine or experimental – involve some risk of injury. In spite of all precautions, you might develop medical complications from participating in this study. If such complications arise, the Protocol Director and the research study staff will assist you in obtaining appropriate medical treatment. In the event that you have an injury or illness that is directly caused by your participation in this study, reimbursement for all related costs of care first will be sought from your insurer, managed care plan, or other benefits program. You will be responsible for any associated co-payments or deductibles as required by your insurance.

If costs of care related to such an injury are not covered by your insurer, managed care plan or other benefits program, you may be responsible for these costs. If you are unable to pay for such costs, the Protocol Director will assist you in applying for supplemental benefits and explain how to apply for patient financial assistance from the hospital.
Additionally, Stanford is not responsible for research and medical care by other institutions or personnel participating in this study. You do not waive any liability rights for personal injury by signing this form.

CONTACT INFORMATION

Contact information should include the following as appropriate.

Questions, Concerns, or Complaints: If you have any questions, concerns or complaints about this research study, its procedures, risks and benefits, or alternative courses of treatment, you should ask the Protocol Director, Eswar Krishnan MD. You may contact him now or later at 650 725 8004.

Injury Notification: If you feel you have been hurt by being a part of this study, please contact the Protocol Director, Eswar Krishnan MD at 650-725 8004.

Independent Contact: If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact the Stanford Institutional Review Board (IRB) to speak to someone independent of the research team at (650)-723-5244 or toll free at 1-866-680-2906. You can also write to the Stanford IRB, Stanford University, Stanford, CA 94305-5401.

EXPERIMENTAL SUBJECT’S BILL OF RIGHTS

As a research participant you have the following rights. These rights include but are not limited to the participant's right to:

- be informed of the nature and purpose of the experiment;
- be given an explanation of the procedures to be followed in the medical experiment, and any drug or device to be utilized;
- be given a description of any attendant discomforts and risks reasonably to be expected;
- be given an explanation of any benefits to the subject reasonably to be expected, if applicable;
- be given a disclosure of any appropriate alternatives, drugs or devices that might be advantageous to the subject, their relative risks and benefits;
- be informed of the avenues of medical treatment, if any available to the subject after the experiment if complications should arise;
• be given an opportunity to ask questions concerning the experiment or the procedures involved;
• be instructed that consent to participate in the medical experiment may be withdrawn at any time and the subject may discontinue participation without prejudice;
• be given a copy of the signed and dated consent form; and
• be given the opportunity to decide to consent or not to consent to a medical experiment without the intervention of any element of force, fraud, deceit, duress, coercion or undue influence on the subject’s decision.

May we contact you about future studies that may be of interest to you?

_____ Yes  _____ No

YOUR SIGNATURE INDICATES THAT YOU HAVE READ AND UNDERSTAND THE ABOVE INFORMATION, THAT YOU HAVE DISCUSSED THIS STUDY WITH THE PERSON OBTAINING CONSENT, THAT YOU HAVE DECIDED TO PARTICIPATE BASED ON THE INFORMATION PROVIDED, AND THAT A COPY OF THIS FORM HAS BEEN GIVEN TO YOU.

____________________________________  ______________
Signature of Adult Participant  Date

Person Obtaining Consent
I attest that the requirements for informed consent for the medical research project described in this form have been satisfied – that the subject has been provided with the Experimental Subject’s Bill of Rights, if appropriate, that I have discussed the research project with the subject and explained to him or her in non-technical terms all of the information contained in this informed consent form, including any risks and adverse reactions that may reasonably be expected to occur. I further certify that I encouraged the subject to ask questions and that all questions asked were answered.

___________________________________  _____________
Signature of Person Obtaining Consent  Date

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