

SenNet Consortium

Steering Committee Charter

Background

The Cellular Senescence Network (SenNet) Consortium is a program funded through the National Institutes of Health (NIH) Common Fund. The aim of SenNet is to identify and characterize the heterogeneity of senescent cells in primary human tissues in order to gain a deeper understanding of the biology of cellular senescence in the body, aid biomedical researchers in the development therapeutics to address cellular senescence, and improve overall human health. SenNet will accomplish this vision through the following goals:

- Catalyze the development of a framework for mapping cellular senescence and its associated secretory phenotype at single cell resolution;
- Generate and publicly distribute multimodal atlases of senescent cells, including information about the characteristics of these cells, the molecules they secrete, and the distinctions between types of senescent cells;
- Identify and characterize senescent cells across different parts of the body, physiological states, sexes and genders, races and ethnicities, and stages of human life, including development of common terms and classifications for senescent cells;
- Establish guidelines and parameters for the regulation of senescence, including the appropriate use of inducers and their removal via senolytics, immune therapy, and other techniques;
- Build upon previous advances in single cell analysis to improve and develop the next generation of tools and technologies, including experimental and computational model systems and advanced imaging tools, that can enable identification and validation of senescence at the cellular, tissue, and whole-body levels;
- Contribute to the mentoring and training of the next generation of scientists.

Initiatives

The SenNet program has the three following research initiatives:

- **Tissue Mapping Centers (TMCs):** These Centers will generate extensive high-resolution, high-content, multiscale biomarkers and maps—using medical imaging, omics, and other technologies—across the human lifespan and various health states in order to create the Human Atlas of Cellular Senescence.
- **Technology Development Projects (TDs):** These projects will establish proof of principle and validation of novel analytics and technologies—including biomarkers, hardware, and postprocessing algorithms— to study cellular senescence in model systems and human tissues.
- **Consortium Organization and Data Coordinating Center (CODCC):** This Center will serve as an organizational hub for the consortium. CODCC will collect, store, and disseminate all data, analyses, tools, models, and maps generated by the consortium to ensure standardization and

sustainability of data. CODCC will manage the integration of data into the larger Common Fund Data Ecosystem on behalf of SenNet.

Membership and Roles

The SenNet Steering Committee (SC) comprises key personnel of awards funded by the SenNet program. The initiatives will delegate representatives to the Steering Committee to report important findings and developments and to disseminate Steering Committee decisions as applicable to the entire SenNet consortium. The Steering Committee will standardize existing and/or adopt new operating procedures across the consortium, as is possible, to ensure reliable data collection, analysis, and validation.

Membership of the Steering Committee is:

- Contact Program Directors (PDs)/Principal Investigators (PIs) (*1 voting member per award*)
- One additional key personnel from each award (*non-voting, can represent award as voting member if the designated voting member cannot attend*)
- Program staff from the National Institutes of Health, such as Project Scientists and Program Officers (*non-voting*)
- External Program Consultants (*ex officio, non-voting*)

Responsibilities

The SenNet Steering Committee (SC) is the main self-governing body for the SenNet Consortium. The SC is responsible for encouraging and ensuring coordination and collaboration among Consortium members, formulating recommendations to the NIH related to Consortium direction and policies, and ensuring consistent commitment and adherence with program goals. The responsibilities of the SenNet SC are to:

- Identify scientific and policy priorities for the SenNet Consortium,
- Establish goals and milestones and review progress for the Consortium,
- Institute policies and procedures that promote coordination and collaboration within and amongst the Steering Committee and all Consortium members, as well as NIH and the broader research community,
- Ensure adherence to SenNet standard operating procedures and utilization of resources developed by the consortium, as well as existing NIH resources and programs,
- Establish subcommittees and working groups, as needed, to promote progress towards project goals and milestones,
- Disseminate, in coordination with CODCC, progress updates and resources funded by the program to the broader scientific community,
- Report progress, challenges, opportunities, and recommendations to the NIH.

The SC is co-chaired by two PD/PIs from two different SenNet awards. Co-chairs (selected by NIH staff) typically serve for 12 months at a time. In general, besides the two current co-chairs, one or more chair elects will be selected (by NIH staff) who will assume the role of chair at the end of the chair's term and serve as the co-chair if an acting chair is unavailable. The responsibility of the co-chairs includes:

developing the agenda for SC meetings with input from NIH staff and the Executive Secretary, prioritizing agenda items, conducting SC meetings, following up on action items, ensuring all voices are heard during discussions, determining if a quorum of members are present, and recording SC decisions accurately. The responsibilities of the Executive Secretary include: scheduling meetings; preparing a draft agenda and communicating with chairs at least one week before the scheduled meeting to review and finalize the agenda; distributing meeting materials at least one week before the meeting; taking accurate meeting summaries; and tracking action items.

Committee Process

The Steering Committee will meet monthly via videoconference and in-person, if possible, at the SenNet semi-annual Steering Committee meeting. The SC may also meet on an ad hoc basis, as needed. Meetings will primarily take place via videoconference but may also take place by teleconference or face to face, whichever is agreed to be most appropriate. Urgent issues may be communicated to the Steering Committee by email. CODCC is charged with coordinating with NIH and relevant participants to schedule in-person and virtual Steering Committee meetings and Steering Committee working groups.

The SC may form ad hoc working groups to investigate specific areas of policy, procedures, and interest; inform its decision-making and recommendations; and carry out specific Consortium tasks. All consortium members are encouraged to participate in one or more relevant working groups. Each initiative—i.e. TMCs, TDs, and CODCC—will strive to have representation in as many working groups as possible, considering the size and expertise of the team. Each working group will appoint co-chairs at least one of whom will also be a member of the SC and who will be responsible for reporting back progress and recommendations from working groups. Three working groups and one award—each represented by a working group or award member respectively—will present updates and progress at each Steering Committee meeting. CODCC will be responsible for scheduling and coordinating the calendar of the working group and award presentations to the Steering Committee.

It is expected that most of the decisions on the activities of the SenNet Steering Committee will be reached by consensus. If a vote is needed, each funded project PD/PI (or Contact PI in the case of multi-PI projects) will have one vote. PIs can designate a team member to vote for the team if they are unavailable for a specific SC meeting/discussion. NIH staff are non-voting members of the SC but will have substantial input, review, and approval of policies developed by the Steering Committee. A quorum is 60% of voting members. If a vote is necessary, at least 60% of the votes from present members will be required for approval. Steering Committee recommendations will go to the SenNet Program Manager and the NIH Working Group for approval. If a consensus or required majority vote cannot be achieved by the SC on a particular issue, the matter will be referred to the SenNet Program Manager and the NIH Working Group for resolution.

The SC co-chairs, along with a CODCC representative, will meet with NIH staff on an ad hoc basis in case of urgent and/or sensitive consortium-related issues which require immediate actions.

Agendas & Meeting Materials

The CODCC [Project Manager] serves as the Executive Secretary of the SC and will help facilitate the

development of the agenda. CODCC will also provide logistical arrangements and support for the SC. The agenda and meeting materials will typically be sent at least two business days in advance. CODCC will create an annual draft calendar of proposed update meetings and presentations to be finalized and approved by the SC.

A summary of the previous meeting and meeting materials will be produced for each meeting of the Steering Committee and archived as part of the record of SenNet Consortium activities. These summaries and materials will be circulated in draft form to all members within one week of the meeting date and finalized—including any comments or amendments— within two weeks by the co-chairs. A summary of the meeting will be sent to the entire Consortium as a part of the weekly “SenNet Spotlight” internal digest.

For more details about SC meeting protocols, see the SenNet Steering Committee Meeting SOP document.

Conflict of Interest

Individuals who serve on the SC as voting members must disclose any potential conflicts of interest—whether real or perceived—in advance of any relevant SC decision-making. A voting member may be required to recuse themselves when a conflict is identified and cannot be otherwise managed.

Confidentiality

All materials, discussions, and proceedings of the SC are confidential to the Consortium, unless specifically noted by the SC Co-Chairs.