**CFAR Africure Goals and Objectives:**

A **Mission** is the overarching societal ideal that a person or organization strives to accomplish.

The CFAR Africure’s mission is: “***To foster a new generation of research scientists from Africa, working in Africa, to ensure that future research on HIV cure strategies is inclusive of the people most in need of achieving cures and who will benefit most from therapeutic advances****.*”

**Goals** are broad targets that when met, help fulfill a Mission.

One Africure Goal is: “***To recruit, mentor, and support early- and mid-career stage investigators from Sub-Saharan Africa to become independent scientists pursuing HIV cure research***.” Each time that Goal is met we are one step closer to achieving our Mission.

**Objectives** are concrete tangible actions that people or organizations take to advance a Goal or Mission. There are multiple types of Objectives; the one most relevant to writing a CFAR Africure Mentoring Plan is called an Outcome Objective. **An *outcome* objective defines how success in accomplishing that objective is measured.** When written into a CFAR Africure Mentoring Plan, outcome objectives are used to establish a benchmark for success in having accomplished the Mentoring Plan’s various goals and objectives.

**SMAART Outcome** **Objectives** are outcome objectives that include wording that is **S**pecific, **M**easurable, and **A**mbitious but also **A**chievable, **R**elevant, and **T**ime-bound (SMAART). **The entire point of a SMAART Objectives is to define success clearly and concretely**.

For example, one potential way of defining the Africure program’s success in meeting our Goal to advance African Cure researchers can be found in this SMAART outcome objective: **“*By two years from the end of a given Africure Cohort’s funded research activities, at least 80% of the Scholars in that cohort whose project generated positive findings have published at least one scholarly paper*.”**

There is a straightforward formula for writing a SMAART outcome objective:

A: By [time point X],

B: [insert detailed description of persons eligible to be assessed]

C: will / will have / will be able to
D: [insert measurable behavioral verb – see list of Measurable verbs on p.3]

E: [insert description of desired outcome]

Deconstructing the SMAART Outcome Objective above to map to this formula yields:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Sentence component | Notes | Applicable SMAARTComponent  |
| A | By two years from the end of a given Africure Cohort’s funded research activities… | *This defines the* ***specifics*** *of who is being assessed (i.e.,* a given CFAR Africure cohort*) AND the earliest* ***time point*** *at which it is fair to begin assessing them for success in meeting the objective (i.e.,* 2 years after the end of that Cohort’s funded research activities*).* | Time-bound, Specific |
| B | … at least 80% of … | *This establishes the lowest percent of Scholars in the Cohort who must be successful before the objective can be considered to have been met (i.e.,* 80%*). This percentage must be simultaneously low enough to be* ***achievable*** *and high enough to make “success” meaningful (****ambitious****).* | Ambitious, Achievable |
| … the Scholars in that cohort whose project generated positive findings … | *This defines the* ***specifics*** *of the evaluation’s inclusion criteria (i.e.; the evaluation is restricted to* Scholars in a given cohort whose projects did generated positive findings*)*  | Specific |
| C | … will have…  | *[past / present / future tense]* |  (N/A) |
| D | … published … | *This verb (i.e.;* received*) is drawn from the list of* ***approved Measurable Behavioral Verbs*** *(see p. 3).*  | Measurable |
| E | … at least one … | *This defines a fully* ***measurable*** *level of accomplishment that leaves room to do better but, even if only just barely met is still considered* ***ambitious*** *enough to count.*  | Measurable, Ambitious |
| … scholarly paper. | *This defines the* ***specifics*** *of a desired outcome that is* ***relevant*** *to the Goal or Mission associated with this objective (i.e., the receipt of at least one* new publication, based on [the Scholar’s] findings*.)* | Specifics, Relevant |

To re-state the above, the Outcome Objective above is SMAART because it is:

**S**: *Specific*. There is nothing vague about this objective. It specifies exactly:

* ***who*** will be evaluated (Scholars whose CFAR Africure projects generated positive findings),
* ***what*** will be measured (whether they published an article),
* ***when*** it is fair to begin measuring success (two years after the end of a given Cohort’s funded Africure research activities) and
* ***how*** many individuals have to succeed before the objective itself is deemed to have been met (at least 80% of the people eligible to be assessed).

**M**: *Measurable*. This Outcome objective describes a task that can be concretely measured for success. Specifically, anyone can go online and check myNCBI to see if a former CFAR Africure scholar has or has not published that meets the objective’s success criteria. NOTE. It is not required that all SMAART objectives be *objectively* measurable. *Subjective* measures such as self-report are also permissible in appropriate circumstances.

**A**: *Achievable*. This outcome objective is considered to be achievable because the bar for success is not set impossibly high. Specifically, by setting the bar for success at 80%, we acknowledge that – for various excellent reasons that may not be predictable in advance – not every individual eligible to be included in this assessment may end up publishing an Africure-associated paper within the stipulated time period of two years post completion of project.

**A**: *Ambitious*. This outcome objective is sufficiently ambitious because the bar for success is not set ridiculously low. While the bar may seem low at first (on the face of it, 80% does not seem like a very ambitious target), 80% translates into 4 out of the 5 people in a typical Africure cohort. Plus, the addition of the words “**at least** 80%”) make it clear that we hope to achieve more than n=4/5.

**R**: *Relevant*. This Outcome objective is highly relevant to its related Goal *(“To promote the development of independent scientists* *pursuing HIV cure research”)*.

**T**: *Time limited*. This Outcome objective is time-limited because it explicitly specifies the earliest point in time at which it would be reasonable to begin assessing whether the CFAR Africure program has met this particular objective. Time limitations are always included in well written Outcome objectives to prevent assessments from happening before the objective has a reasonable chance of having been successful.

**Measurable Behavioral Verbs**

*all examples adapted for use by CFAR Africure applicants from* [*http://www.adprima.com/verbs.htm*](http://www.adprima.com/verbs.htm)

**Use the verbs below when constructing a Measurable outcome objective:**

**By [insert date or time frame here] participants will have / will be able to …**

* **Apply a Principle:** E.g., … investigators will be able to *apply the principle* of …. to explain why.…..
* **Calculate:** E.g., …investigators will be able to use a sample data set and *calculate* the p-value of a statistical significance test.
* **Classify:** E.g. …investigators will be able to *classify* at least three examples of methods that fall within specified ranges of cost and availability.
* **Construct:** E.g. …applicants will be able to *construct* a SMAART Outcome objective.
* **Demonstrate:** E.g. … study subjects will be able to *demonstrate* the proper method of a laboratory process.
* **Describe:** E.g. … study staff will be able to *describe* potential obstacles to implementing the proposed study activities.
* **Distinguish:** E.g. … participants will be able to *distinguish* between dependent and independent variables.
* **Estimate:** E.g. …study staff will be able to *estimate* the replication-competent reservoir.
* **Evaluate:** E.g. … investigators will be able to *evaluate* CCR5-targeted gene editing as a potentially safer path to cure in people living with HIV on ART.
* **Identify:** E.g. … study staff will be able to *identify* strategies that might then be tested in well-powered, controlled clinical trials.
* **Interpret:** E.g. …participants will be able to *interpret* a data table taken from a published research report.
* **Measure:** E.g. … study staff will be able to use a stopwatch to *measure* the amount of time it takes HIV home test kit users to correctly wait for blood spot tests to dry.
* **Order:** E.g. … study staff will be able to list, in proper *order*, the steps in using an assay.
* **Predict:** E.g. … identify biomarkers for post-treatment control that may *predict* remission or cure.
* **Receive**: E.g. … investigators will have *received* NIH funding
* **Solve:** E.g. … study staff will have worked with a biostatistician to *solve* the following query: “How many study subjects are needed in order to sufficiently power the study?”
* **Submit**: E.g. … past Africure scholars will *submit* grant applications to NIH.