The RCAI Advisory Council meeting in the new RCAI building was attended by Drs. Max Cooper (Chair), Shigetaka Asano, Kin-ichi Arai, Antonio Coutinho, Mark Green, Sonoko Habu, Bernard Malissen, and Diane Mathis. Drs. Takehiko Sasazuki and Tasuku Honjo were unable to attend, but provided written comments and suggestions. The primary goal for this first meeting of the Advisory Council was to review the overall organization, quality of the group, team and unit leaders, and adequacy of research plans.

Background

RCAI was officially founded in the spring of 2001. The core group of senior investigators was appointed in the autumn of 2001, the first round of team leaders in the spring of 2002, and more than one third of center team or unit leaders in the last six months. Most groups, teams, and units are still in the process of setting up their laboratory at the center’s new building in Yokohama. Much of RCAI’s budget during the

Overall Evaluation

The Advisory Council is impressed that RCAI has recruited a highly qualified group of scientists. This group includes senior scientists who are international leaders in their fields and highly promising young investigators from well known laboratories in Japan or abroad. The research summaries presented by group and team leaders include well-conceived projects with a high probability of success and a suitable mix of innovative high-risk initiatives that make use of the impressive resources available within the RIKEN organization. The Advisory Council was very favorably impressed with most research projects presented by younger members of the center, feeling that the success of the Creative Research Program is crucially important to the success of RCAI. The Advisory Council applauds the decision to provide young team leaders with great freedom and practical support through the center’s core facilities. Several young investigators have already been able to significantly enhance their research performance since joining the center, through optimal use of the competencies available in the center. Many of the younger team leaders are building an independent research group for the first time, and they will need continual monitoring and oversight in order to enhance the likelihood of success. The overall RCAI approach to research management is well conceived in this regard. It reflects both the mission of the center and the center’s position within immunological research in Japan.
RCAI has established two programs that provide incentives for center investigators to engage in international collaborations and disease-oriented research. The former program has already led to several collaborative projects that will bring highly regarded overseas scientists to the center and continued funding for this program is a high priority for the center. The Advisory Council strongly endorses the pragmatic approach of RCAI toward research collaboration and efforts to build research alliances with other organizations in Japan.

**Overall Research Direction**
The primary focus of the center is on the basic science of immunology. Strong research programs in regulatory lymphocytes, immune regulation, immune tolerance, and related immunology research areas will likely lead in time to important therapeutic innovations in allergic diseases, autoimmunity, transplantation biology, and immune surveillance. However, rather than the development of in-house research capabilities focused on clinical or translational research, the RCAI plan is to implement these activities through a network of collaborations with clinical research centers and companies in Japan and abroad. The Advisory Council strongly endorses this basic inquiry approach to immunological research.

**Specific Recommendations**
*Strategic and translational research.* The translation of basic research-finding into therapeutic application is a notoriously difficult, high-risk, and time-consuming process that requires exceedingly high levels of investment that may be well beyond the available center funding. In a national climate in which the translational research system appears to be in a state of transition, the Advisory Council appreciates the strong desire for the center to contribute to clinical innovation. The considerable risk for RCAI, its collaborators, and for patients who are involved in premature clinical trials, however, necessitates an extremely cautious approach toward clinical research. For the present, the Advisory Council therefore recommends a sharp focus on a limited number of pre-clinical studies instead of participation in early stage clinical research.

*Central facilities.* Continuing investment will be necessary to maintain the central facilities at the highest standard, and collaborations with suppliers in Japan and abroad will be important to guarantee access of RCAI scientists to the latest in instrumentation technology. To guarantee optimal use of its central facilities, RCAI should establish user committees with broad representation of center scientists and should engage younger investigators in the management of the central facilities. Once the central facilities are running smoothly, the center should consider providing outside scientists with access to these resources, including valuable databases, in a way that will not compromise center research
activities.

**Team leader meetings.** The Advisory Council suggests quarterly meetings of center team leaders in order to provide younger RCAI investigators with adequate representation and the opportunity to voice concerns and discuss specific problems. These sessions could be chaired by either of the vice directors at the center.

**Post-doctoral fellow and student hiring and support systems.** An important goal is to enable young RCAI scientists to build successful research teams. The ultimate success of these highly promising young investigators will depend to a considerable extent on the quality of post-doctoral fellows and students whom they recruit. To facilitate this difficult and important endeavor, the Advisory Council suggests a center-wide program to support the recruitment of post-doctoral fellows and students. Every possible effort should be devoted toward making the RCAI a scientifically-stimulating and socially-inviting environment for trainees. A full-time person is recommended to support the recruitment of post-doctoral fellows and students and to provide assistance concerning housing, health, welfare, and social issues to students and post-doctoral fellows.

**Fostering diversity.** While the initial RCAI staff recruitment includes an impressive, diverse group of senior and junior investigators, it will be very important in future hiring decisions to reinforce and expand this diversity of approaches and institutional backgrounds. This could extend to hiring team leaders with expertise outside the immunology field whose research is complementary to immunological research.

**International visibility and exposure.** The Advisory Council has very high expectations with regard to RCAI's potential to become a major international center for immunological research. To reach this potential, every possible effort should be made to welcome foreign investigators for short term visits and for more extended periods of research at the center. The RCAI Research Collaboration Awards Program has already resulted in the initiation of well conceived projects that will bring in a number of highly regarded foreign investigators. This excellent program should be continued with a high priority for the near future. RCAI should also consider complementing this program with other activities to support short-term visitors. These could include international meetings and RCAI courses in basic immunology and cutting edge technology.

**English as common language.** Since English is the international currency of scientific communication, the Advisory Council encourages its general use in
seminars and scientific meetings. While it may not be possible to introduce English as the administrative language, an effort should be made to make important documentation available in English and, more generally, to build a linguistic environment that facilitates the hiring of non-Japanese investigators.

*Location and facilities.* Although the environment immediately surrounding the center could be more inviting, efforts have been made to expand communication spaces within the center, such as coffee/tea lounges on each floor. Additional efforts to encourage informal communication and scientific exchange will be necessary to build the most attractive international research center environment.

*Interface with the RIKEN Administration.* The fact that RCAI research teams were primarily located at host organizations throughout Japan before April 2004 underlies the need to work toward building a smooth interface between the center and the RIKEN research administration. This could include shifting some administrative responsibilities, such as public relations and planning, from the Research Promotion Division to the center or, alternatively, creating a small team within the center to manage relationships between the center and RIKEN. Current administrative decision making processes appear unduly time consuming. Simple tasks, such as processing a request for a personal identification card, currently may take several weeks. These inconveniences should, of course, be easily remedied.

*Intellectual property rights management.* The Advisory Council encourages efforts to complement the standard intellectual property rights management approach of RIKEN with measures tailored to specific RCAI needs as a large biomedical research center.

**The Noyori Initiative at RCAI**

The Noyori Initiative provides excellent general guidelines for building a world-class research environment at RIKEN, and RCAI has responded with a cohesive strategic plan that includes an impressive set of innovative proposals. The successful implementation of these proposals will require a seamless interface between the center, its director, and the Research Promotion Division of the Yokohama Institute. Clarity of lines of responsibility between RCAI and the RIKEN administration will be especially important in this regard.

**Future RCAI Reviews**

The director, Dr. Masaru Tanaguchi, is encouraged to develop a canonical plan for future RCAI reviews within the necessary time and economic constraints. More time will be needed for future in-depth reviews of individual research programs. For this purpose, either the number of research laboratories to be reviewed at
one time will need to be restricted or, as a less suitable alternative, two or more simultaneous review sessions could be conducted. The inclusion of selected ad hoc experts will be needed for some research units, given the diversity of research activities. It is recommended that the research output of core research groups be evaluated after 4 to 5 years. For junior research teams, the Advisory Council suggests more frequent review of research activities, possibly within 2 to 3 years.