

*-----TO FACULTY IN PREPARATION FOR ANNUAL REVIEW*

Dear \_\_,

The time has come for you to meet with your assigned chair's office representative for your annual review. We will contact you soon to schedule a meeting, which must be conducted within the next 3 months. In order to prepare for that meeting, please complete the following tasks.

1. Update your CV and send a copy to [chair's office administrator].
2. Pull together for the meeting any education evaluations or other documentation of your activities from the previous year that you think should be considered (e.g., an educator's portfolio.) Bring it with you to the meeting.
3. Meet with your clinical supervisor, if applicable, to complete your clinical performance evaluation. Your supervisor is copied here and the evaluation form is attached. Once it is completed and you have discussed its results together, the supervisor will forward the evaluation form to Sue Klein for inclusion in your file and review with the assoc chair.
4. Update your faculty web page ([dept website administrator] can help update the content. Please also to be sure to include your picture on the site.)
5. Please use your mentor to help identify issues, questions, concerns you would like to raise in your annual review meeting as well.

It is important that all these tasks be completed prior to the annual review meeting. Thanks for your help in making the process a smooth one.

Sincerely,

Eric

*-----TO ASSOCIATE CHAIR RE: THEIR PREPARATION FOR AND CONDUCT OF THE ANNUAL REVIEW MEETING WITH A FACULTY MEMBER ASSIGNED TO THEM.*

- You will be copied on letters to faculty members notifying them of the upcoming annual review meeting.
- Your secretary then should reach out to the faculty member to schedule the meeting with you, copying [chair's office administrator] on the date.
- At the time of the meeting, retrieve from [chair's office administrator] the faculty member's file, which should contain the clinical performance eval, the previous year's annual review report (which should include goals for the year) and any other quality assurance information of which you should be aware (e.g., results of peer review conducted in last year, FPPEs)
- Complete the annual review form and return it to the faculty member, copied to [chair's office administrator] for inclusion in the faculty member's file for the next academic year.

## **Department of Psychiatry Faculty Development Program**

Job satisfaction and delivery of the highest quality clinical care, teaching, and research by faculty members depend on continuing professional growth. That growth in turn depends on (a) mentorship, (b) the articulation of career development goals and objectives, and (c) systematic performance evaluation and feedback. The Department of Psychiatry has in place a set of policies and procedures that are designed to facilitate the continued professional growth of each member of its faculty. Elements of the Faculty Development Program include:

1. ***Each member of the faculty is assigned a supervisor and mentor:*** A faculty member may have a number of roles, and hence a number of separate mentors and supervisors. For this purpose, however, we identify one supervisor and one mentor for each individual.

The *Supervisor* is responsible for more immediate oversight of the faculty member's primary work functions, related operational issues, and provision of *feedback* to him or her on a regular basis. As well, for those faculty members with clinical responsibilities the supervisor conducts the more formal *annual clinical performance evaluation*. The results of this evaluation then become a component of the *annual review* described below.

The *Mentor* serves as an advisor or guide to the faculty member, available to provide advice and support and to help identify *strengths and weaknesses, goals and objectives, and opportunities* for expanding and applying one's skills and knowledge. As a more senior member of the faculty, the mentor should also help define the faculty member's unique position within the Department, placing their work in the larger context of departmental priorities.

2. ***Academic track faculty members complete an Academic Development Plan (ADP):*** By the time of promotion to the rank of Assistant Professor (or within one year of appointment at that rank), each faculty member is to have developed an ADP, a document prepared by the junior faculty member in conjunction with senior faculty mentors to serve as a developmental blueprint during the opening years of one's academic career. A copy of the guidelines for preparing the ADP is attached.

3. ***An Associate Chair (AC) is assigned to each faculty member:*** The purpose of this assignment is twofold. First, the AC serves as the faculty member's link to Departmental Administration, available to provide input and support with regard to issues that the mentor and supervisor are unable to address. Second, the assigned AC conducts the faculty member's *annual review*.

3. ***Each faculty member's goals and performance are reviewed annually:*** Each faculty member meets annually with his or her assigned AC. Objectives of the annual review are (1) to review progress in the past year; (2) to tailor goals for the following year in each area of professional functioning; (3) to consider the resources required by the faculty member to achieve the defined goals and objectives for the coming year and beyond.

## **ACADEMIC DEVELOPMENT PLAN**

### **INTRODUCTION**

**Definition:** An Academic Development Plan (ADP) is a document prepared by a junior faculty member, in conjunction with senior faculty mentors, to serve as a developmental blueprint during the opening years of one's academic career. The preparation of a formal written document is intended to encapsulate an interactive process involving a junior faculty member, senior faculty mentors, and Department leadership. For those faculty members initially appointed Senior Instructor, completion of an ADP will be an essential step for promotion to Assistant Professor. Faculty appointed or recruited as Assistant Professor will be expected to complete an ADP by the end of their first year.

**Background:** The Department of Psychiatry's academic excellence depends upon a talented and vibrant faculty. Promoting the career development of junior faculty is fundamental to strengthening and renewing our achievements and leadership in teaching, patient care, and research. Participation as a teacher is a "threshold value" for appointment and promotion. While excellence as a teacher is not sufficient by itself for promotion, a failure to participate adequately in the educational life of the Department and the Medical Center is inconsistent with one's appointment to the academic faculty. Scholarship is a key ingredient; the pursuit of new knowledge is an essential feature of any academic department, and particularly critical to the Department of Psychiatry. Thus, participation in peer reviewed research is highly regarded, and academic scholarship involving writing and publishing is essential. Faculty who are clinician-scholars must demonstrate continuing growth and development as an ethical provider of the highest quality care to their patients. Administrative leadership is an important venue for enhancing the delivery of clinical care and teaching, and a route through which talented faculty may creatively shape the programs of the Department. While not chosen by all members of the faculty, recognition of administrative excellence is a critical component for the promotion of those involved.

The process of fostering faculty development is most successful when motivated Assistant Professors or Senior Instructors work together with senior faculty mentors (at the professorial and associate professor levels) to develop a coherently organized plan for mentoring and academic advancement that recognizes the aspirations of junior faculty, together with the needs of programs and the Department. An effective plan outlines a developmental path combining scholarship and teaching, clinical care where appropriate, and for some, administration. The specific mix of activities depends upon the unique circumstances of each faculty member; however, all plans must meet the standards of excellence necessary for promotion in the Department and the University of Rochester School of Medicine and Dentistry (see Regulations of the Faculty in the University of Rochester Medical Center Faculty Handbook.)

### **PURPOSE**

The Academic Development Plan is intended to assist the personal growth and career development of academic faculty in the Department of Psychiatry – those in the Clinician-Teacher (CT), Teacher-Clinician-Scholar (TCS), Researcher-Clinician-Teacher (RCT), and Researcher-Teacher (RT) options as defined by the Regulations of the Faculty (hereafter referred to as "tracks"). Through the process of its formulation, these junior faculty members,

together with their mentors, program, service, and discipline directors (as appropriate), and the Chair consider future directions and plans leading to promotion to Associate Professor. Formulation of an effective plan involves careful consideration of personal interests and aspirations, sources of fiscal support, and program and Department priorities. Acceptance of a proposed plan (or a comparable career award to an extramural funding source [e.g., K-award application to NIH]) is an essential element of promotion to Assistant Professor.

Upon completion of the five-year program outlined in the ADP, it is expected that the junior faculty member will have developed a recognized body of scholarship reflecting their growing expertise in the psychiatric sciences and demonstrated skills as a teacher, and where applicable, as a clinician or an administrator. Many will have begun to assume greater leadership roles in the activities of the Department. Successfully fulfilling the goals outlined in a well-conceived ADP will form the basis for future promotion in the Department and the School of Medicine and Dentistry.

### **THE ROLE OF MENTORSHIP**

The Academic Development Plan (ADP) is a joint effort of the junior faculty member and his or her mentors. Mentoring entails two components, *process* and *content*. “*Process*” includes tasks such as organizing one’s time schedule, balancing among complementary and competing work demands; meeting critical developmental benchmarks; and establishing a record of academic achievement. Process actively considers strategies to meet the standards of excellence expected for promotion. “*Content*” is specific to a defined area of scholarly inquiry or development: A content mentor is an expert in the faculty member’s chosen academic field. One’s process and content mentors often are the same; however, it may be necessary to reach beyond the Department or the Medical Center to establish effective relationships with mentors, particularly as it applies to specialized content areas. All mentors are responsible for assisting with the formulation of the junior faculty member’s career objectives, and personal and institutional values; as necessary, they also may serve as advocates in the Department and the Medical Center.

The ADP should balance scholarly goals with potentially competing demands of clinical service, teaching, or program administration. One must develop a realistic ‘time economy’ for fostering the successful attainment of complementary goals. The process of developing a plan entails a consideration of alternative views of the future that a faculty member may hold for her/himself, as well as a frank appraisal of one’s talents and sources of monetary support. The senior faculty mentor(s) is charged with assisting with a supportive, realistic appraisal of future prospects. The faculty mentor (when not in a position of programmatic responsibility) must work with the program director and the Chair to establish the fiscal basis of support for any plan proposed.

It is the responsibility of program, service and discipline directors to oversee, catalyze, and foster committed mentoring relationships involving senior faculty and all eligible junior faculty within their respective arenas. Program directors and discipline chiefs may not necessarily be mentors themselves, but in their leadership capacities they must maintain a close view of these activities. It is the responsibility of junior faculty to seek out and maintain effective ties with designated mentors, and to bring committed energy and enthusiasm to the career development process. If a mentoring situation proves to be ineffective, it is the responsibility of both the senior faculty mentor and the junior faculty member to elicit assistance from program and discipline directors, and from the Associate Chair for Academic Affairs.

## COMPONENTS OF THE ADP

All faculty members require an ADP that includes the following components. Their relative emphases will differ, however, as a reflection of (a) the faculty member's interests and aspirations, and (b) the role and performance expectations of his or her designated academic track.

1. **Career Development Goals and Objectives** (up to one page): A fundamental premise of the Department and the Medical Center is that junior faculty will strive to develop expertise in a defined area of scholarship that is nationally recognized for its originality and merit. This requires at minimum a five-year perspective, coincident with the 'pre-promotion' time interval at the level of Assistant Professor, as well as a longer-term view. Clarifying this vision is a fundamental first step in establishing a commitment between an individual faculty member and the Department, where the latter ultimately must define a specific institutional investment in the faculty member's career goals. While this may be negotiated explicitly as part of a recruitment process, the clarification of a common set of goals is a central element for enhancing the probability of future faculty success and satisfaction. The ADP serves as a vehicle for defining and describing one's intellectual focus.

Although activities several years hence cannot be planned exactly, it is critically important for the ADP to contain realistic goals and expectations and achievable ends. Therefore, the ADP should begin with a concise statement of the faculty member's *long-term professional goals*, followed by an indication of *career development objectives* for the next five-year period. In effect, this part of the document should articulate the faculty member's vision for their professional future, with delineation of the next critical steps in its attainment. This task is equally pertinent for all tracks.

2. **Description of the Faculty Member** (approximately two pages): The second section contains two parts -- a brief *professional autobiography* and a *critical self-appraisal* of developmental needs.

The professional autobiography should effectively communicate the development of themes (one or more, as indicated) that underpin the current proposal, and from which the faculty member's long term goals and shorter term career development objectives have emerged. Research track (RT and RCT) faculty should describe how their research interests developed, including pivotal training and mentorship experiences, and the context and direction of their work to date. Those with relevant clinical and educational emphases (RCT, TCS, and CT faculty) should describe the genesis of their interests and growing experience as educators and scholars.

Faculty members in all tracks should next provide a *detailed self-assessment*. Informed by the individual's longer term goals and experiences to date, this assessment should critically appraise areas of strength as well as the areas in need of further skill and knowledge development to attain those goals. This "needs assessment" in turn informs the design of the career development plan.

Critical self-appraisal by all faculty members should address strengths and weaknesses in clinical, teaching, and other scholarly realms. Their relative emphases, however, will differ by track. Administrative skill sets may be pertinent for *some* individuals in each track; a needs assessment of specific research skills should be central to all faculty on research intensive tracks.

- CT faculty should most heavily emphasize the teaching and clinical skill sets needed to make them unique institutional resources in both of these domains.
- TCS faculty must in addition provide a detailed consideration of the knowledge and skills they possess and others they will need to acquire in order to establish a coherent, nationally recognized body of scholarship.
- While important to faculty in research intensive tracks (RT, RCT), teaching, administration and clinical skills will receive relatively less attention in their ADPs than appraisal of the knowledge base and research skills pertinent to their areas of focus.

3. **Description of the Faculty Mentor(s)** (one page): The role of senior faculty mentors must be considered carefully and outlined with respect to both the process and content needs of the junior faculty member. Where these cannot be met fully by one individual, multiple mentors or experts should be included. Mentor(s) must be involved actively in the formulation of the ADP and participate regularly with the faculty member as the plan is carried out. A careful description of the role(s) of the mentor(s) should be included.

4. **Plans and Activities:** The faculty member's self-assessment describes where she is now – Point A. Her goals and objectives constitute where she, her mentors and the Department wish her to be at the time of promotion to Associate Professor – Point B. This section of the ADP provides the road map for getting from Point A to Point B. It is a *five-year plan for specific activities and measurable outcomes in each realm of academic responsibility* – teaching, clinical care, and scholarship/research – designed to fulfill her stated career development goals and specific objectives. The time devoted to the identified activities is determined *not* by the number of available hours in the work week, but rather by the standards that must be met for promotion irrespective of income source.

This portion of the ADP will vary in length depending on one's track, from as little as two pages to as many as ten. In any case, it should have three distinct sections:

a. **Clinical Care:** Each faculty member should describe the clinical activities in which he will engage, how he anticipates continuing to grow as a local and regional resource over the next five years, and any associated administrative responsibilities for clinical services he plans to assume. Where such activities are not pertinent (e.g., clinical care for some RT faculty), notation should be made.

b. **Teaching:** In this section the faculty member should delineate the teaching activities in which he will engage and how he anticipates those roles and responsibilities will change over time. For some faculty members, particularly those in TCS and CT tracks, development as a master educator will be a centerpiece of the academic development plan. In that case, describe here in detail the plan by which the requisite departmental leadership role in education will be developed. Plans for the *acquisition of the necessary skill set*, other forms of *scholarship* and the *anticipated scholarly products* necessary for promotion of a master educator should be detailed in the following section.

c. **Scholarship/Research:** The third section is intended as the place in which specific plans are laid out for how faculty members in RT, RCT, and TCS tracks will achieve the level of excellence and distinction expected for promotion to Associate Professor. It should include plans for education and skill development in the faculty member's area of academic focus as well as a proposal for scholarship or research appropriate to the

expectations of the faculty member's particular track. CT track faculty members are not required to articulate a specific scholarly or research project.

- **Education and Skill Development:** Beyond the academic growth and development entailed in an effective mentoring process, often it is necessary for faculty members to undertake more formal educational exercises (e.g., for master educators, courses in supervision or curriculum evaluation; for researchers, courses in research methods), or consultation with experts in their field. It is the responsibility of junior faculty members, together with mentors, program, service, and discipline directors, to define whether and how supplementary educational experiences would prove beneficial. Recommendations should reflect consideration of previously identified strengths and weaknesses, together with an assessment of skills necessary to carry out the outlined scholarly proposal.
- **Scholarship/Research Proposal:** Great attention should be paid to the formulation of an academic proposal, a *plan for scholarly or research development* that will be utilized by the faculty member as a primary means for pursuing his or her career. While it is not expected that this section will be written in the depth of a formal grant proposal, it should serve as a detailed outline for conducting scholarship or research of significant importance or merit, such that peers outside the institution will regard it as valuable. Its successful completion should add to greater understanding of psychiatry and related fields. For most RT and RCT track faculty it should serve as the basis for future research proposals to NIH or leading foundations. For TCS faculty it will define the focus that binds the elements of a career as an academician. It is an optional element of career development for CT track faculty.

This proposal must be a thoughtfully conceived, coherent project that specifies: rationale and background, hypotheses to be tested, study design and methods, and procedure for analysis and interpretation of data. It should include a specific consideration of the *scientific and intellectual issues* that are central to the faculty member's scholarly pursuits. As part of this discussion, it is essential that these issues be *reviewed critically in the context of the relevant research and scholarly literature*, considering major unresolved questions and how this scholarship will affect the field, as well as advance the individual's development. *Consultation with a biostatistician or other expert in research design* will usually be a necessary component of the process. Where applicable, *human subjects and animal* protections must be reviewed and followed scrupulously; institutional approvals will be required before final acceptance.

Where *scholarship* is proposed **that does not entail empirical or quantitative research**, the same level of intellectual rigor will be required, with a detailed proposal defining questions or issues to be examined, scholarly and intellectual methods, and expected outcomes. The scholarly/research proposal of the Academic Development Plan should reflect the concerted efforts of both the junior faculty member and his or her mentors.

**Program and Institutional Plans:** This section, required for all academic tracks, is a shared responsibility of the program director (and discipline or service director in some cases), mentor, and junior faculty member. It should describe the current and future role that the junior faculty member plays in their Department program, including clinical, teaching, and administrative duties. The program director (and mentor) should describe programmatic needs and expectations placed upon the junior faculty member, and programmatic resources available to enhance development.

**Evaluation:** The faculty mentor should monitor evaluation of progress towards the goals of the ADP on an ongoing basis, providing regular feedback to the faculty member. Documentation will be provided through the annual faculty performance review (described elsewhere.)

**Updating the ADP:** The ADP is intended to be a dynamic document that reflects growth and change in the faculty member's academic life over time. While formal updates are not routinely expected, the faculty member and mentor may elect to revise the document as a means of facilitating consideration of career development issues. However, if the faculty member and mentor decide that she should switch tracks, then a new ADP should be prepared before that change is made. The revised plan would in that case serve as the rationale and plan for the newly defined career trajectory.

### **THE PROCESS OF ADP REVIEW**

The faculty member's ADP should be prepared with sufficient time remaining in his or her appointment to allow detailed review by mentors, program leadership, and the Associate Chair for Academic Affairs. The completed document should be submitted for review by the Department's Academic Executive Committee at least three months before promotion to assistant professor, or within the first nine months of employment by newly hired faculty members at the assistant professor level.

Version 1 - 9/93  
Version 2 - 12/96  
Version 3 - 6/98  
Version 4 - 1/03  
Version 5 - 10/04



## Faculty Clinical Performance Evaluation

- The Clinical Performance Evaluation is conducted annually for all faculty members providing direct care to patients within the Department of Psychiatry.
- It is completed as one component of each faculty member's annual review, using objective data whenever possible.
- Completed evaluations are to be signed by the supervisor and supervisee, and returned to the office of the Associate Chair for Clinical Programs.

Supervisee Name: \_\_\_\_\_

Supervisor Name: \_\_\_\_\_

Evaluation Date: \_\_\_\_\_

Please rate each of the following areas on a scale of 1 to 5 as follows:

1= Outstanding 2= Very Good 3= Acceptable 4 =Improvement Needed 5= Unacceptable

### Clinical Skill \_\_\_\_\_

- Provides accurate diagnoses and effective treatments
- Establishes effective therapeutic alliances with patients
- Partners effectively with family members and collateral contacts
- Generates a minimum number of patient and family complaints

### Clinical Knowledge \_\_\_\_\_

- Psychopathology, biopsychosocial case formulation
- Psychopharmacology and other somatic therapies
- Psychosocial treatment interventions
- Relevant community resources

### Teamwork \_\_\_\_\_

- Works effectively with other faculty and staff members
- Addresses conflicts in a constructive manner
- Promotes unity and builds morale among co-workers

### Cultural Competence \_\_\_\_\_

- Treats patients and co-workers in a sensitive and caring manner with respect to differences in race and ethnicity, religion, socio-economic status, gender and sexual orientation
- Increases understanding of diversity issues through attendance at training events

**Productivity** \_\_\_\_\_

- Serves expected number of patients based on units of service, caseload size or other appropriate measure.
- Works at expected rate based on LOS, patients seen per shift or other appropriate measure.

**Coverage** \_\_\_\_\_

- Provides clinical coverage for vacation and sick days when needed
- Provides other forms of coverage such as administrative and teaching coverage when needed

**Reliability** \_\_\_\_\_

- Attendance
- Timeliness

**Documentation** \_\_\_\_\_

- Documentation is timely and appropriate, including treatment plans, discharge summaries and billing codes.
- Handwriting is legible

**Additional Comments:**

**Overall Rating:** \_\_\_\_\_

- 1      2      3      4      5

**Supervisee Signature and Date** \_\_\_\_\_

**Supervisor Signature and Date** \_\_\_\_\_

**University of Rochester  
Department of Psychiatry**

**PEER REVIEW OF ATTENDING PHYSICIAN**

MRN#	
Ambulatory Service Attending	
Resident (if applicable)	
Pt's Last Name	
Service Site	
Period of Review (retrospective 6 month block)	
Date:	
Reviewer:	

**PART I: REVIEW OF QUALITY OF CARE AND DOCUMENTATION**

Answer each question below. If you answer “no” to a question, you must provide a supporting rationale. Because you are reviewing this chart with the benefit of hindsight, try to take into account as you answer these questions the information available to the psychiatrist at the time of the patient’s evaluation.

	Yes	No*	N/A
1. <u>Initial MD Patient Assessment/Diagnostic Workup</u>			
• Does the initial physician evaluation provide an appropriate assessment of the case?	___	___	___
• Are high risk behaviors (suicide, violence) adequately assessed and addressed in plan?	___	___	___
• Were any medical/psychiatric diagnostic tests performed? <input type="checkbox"/> If yes, do they appear appropriate?	___ ___	___ ___	___ ___
• Was documentation of patient contact completed at time of service or by 5pm on the business day following contact?	___	___	___

Comments:

2. <u>Continued Treatment</u>	Yes	No*	N/A
• Were psychiatric and medical problems identified in the treatment plan addressed?	___	___	___
• Were abnormal test results and physical problems addressed?	___	___	___
• Were appropriate tests/studies (e.g. blood work, drug levels, AIMS) ordered in relation to medication regimen?	___	___	___
• Was documentation of patient contact completed at time of service or by 5pm on the business day following contact?	___	___	___

Comments:

CONFIDENTIAL – QA MATERIAL

3.	<u>Drug, ECT, and Other Biological Interventions</u>	Yes	No*	N/A
	• Are the prescribed medications/interventions appropriate for patient’s symptoms and diagnosis?	___	___	___
	• Are no more than 2 antipsychotics prescribed for patient at one time? <input type="checkbox"/> If no, is rationale appropriately documented?	___ ___	___ ___	___ ___
	• Are no more than 2 antidepressants (other than Trazodone), prescribed for patient at one time? <input type="checkbox"/> If no, is rationale appropriately documented?	___ ___	___ ___	___ ___
	• Were medications properly dosed (i.e., was there an appropriate relationship between blood levels/symptoms and changes in medication dosages)?	___	___	___
	• Are side effects or lack thereof documented?	___	___	___
	• If side effects occurred, were they appropriately monitored and addressed?	___	___	___

Comments:

4.	Psychological Interventions (complete only if provided by the physician)	Yes	No*	N/A
	• Is there evidence that appropriate psychotherapies were offered?	___	___	___
	• If the patient is receiving psychotherapy, is the therapeutic approach appropriate for the diagnoses?	___	___	___

Comments:

**PART II: EVALUATION**  
(If you answer “NO” you must provide a supporting rationale.)

<u>Quality of Care Review</u>	Yes	No*	N/A
Based on your judgment, was the quality of care provided by the physician adequate (i.e., did care of this patient meet the standard maintained by Department physicians with comparable privileges)?	___	___	___

**PART III: CASE DISPOSITION**

Should this chart be referred to the Ambulatory Services Senior Medical Director and Clinical Chief of Psychiatric Services for further review and evaluation? (In general, refer cases when the quality of care is questioned, when you are uncertain as to how to evaluate the case, or when you do not wish to evaluate the case alone.)	Yes*	No	N/A
	___	___	___

\* If “YES”, clearly indicate what issues need to be addressed:



**FACULTY ANNUAL REVIEW – conducted by Yeates Conwell, M.D.**

**NAME:**

**Date of review:**

**Academic rank:**

**Faculty option (track):**

**Period of current appointment:**

**Mentor:**

**Supervisor:**

**Materials reviewed: (X):**

**CV**  
**Clinical Performance Evaluation**  
**Teaching evaluations**  
**Faculty web page revisions**  
**Other (specify)**

**ASSESSMENT OF PROGRESS TOWARDS GOALS OF THE LAST YEAR**

**Clinical care:**

**Education and Mentoring:**

**Scholarship and Research:**

**Administration (Includes all forms – clinical, education/mentorship, and research):**

**FACULTY MEMBER'S GOALS FOR THE COMING YEAR**

**Clinical care:**

**Education and Mentorship:**

**Scholarship and Research:**

**Administration:**

**RESOURCE NEEDS:**