

**SCHOOL OF DENTISTRY  
UNIVERSITY OF MARYLAND, BALTIMORE  
BALTIMORE, MARYLAND**

**PROSTHODONTIC RESIDENCY  
PROGRAM  
2022-2023**

## **I. INTRODUCTION**

### **INTRODUCTION**

The purpose of this manual is to give the resident a general overview of the residency program. The information was current when printed but may not totally reflect the day-to-day resident activities due to time constraints and scheduling difficulties.

A tremendous amount of knowledge in all aspects of prosthodontics must be acquired in the span of three years. The educational program requires complete dedication of all participants. A strong desire to learn and excel is essential for success.

### **PURPOSE OF THE PROGRAM**

The purpose of the Prosthodontic Residency Program is to provide progressive clinical, laboratory and didactic training, closely supervised, at the post-graduate level in fixed, removable, and implant prosthodontics. Digital dentistry, temporomandibular dysfunction, maxillofacial prosthodontics, implant placement, the interrelation of other medical/dental clinical specialties as well as the role of the prosthodontist is also included. The program integrates all facets of the biomedical sciences with a comprehensive clinical experience culminating in the award of the certificate in prosthodontics. A Master of Science is also available.

### **PROGRAM GOALS AND OBJECTIVES**

The Prosthodontic Residency Program has the following goals and objectives:

1. Preparation of knowledgeable and skilled prosthodontic clinicians.
2. Preparation and qualification of prosthodontists for certification by the American Board of Prosthodontics.
3. All residents will engage in research activities.
4. Preparation of prosthodontists qualified to serve as mentors in academic programs.

### **SCOPE OF TRAINING**

Training will include all clinical and laboratory phases of prosthodontic practice to include implant placement. The resident will be exposed to a broad range of techniques, including digital technology, used in fixed, removable, implant and maxillofacial prosthodontics, thus gaining the background and experience necessary to select those techniques which work best in their hands, and to instruct others in their use. New and improved materials will be evaluated as they are introduced to the profession.

## **II. GENERAL**

### **MASTER OF SCIENCE**

The Master of Science is especially designed for the residents enrolled in a clinical specialty program. The program will prepare the dentists for careers in dental education and research. Courses are comprised of both lecture and laboratory formats. A significant portion of the program is devoted to the design and completion of a thesis research project, which is a requirement of the program. A separate application to the Graduate School is required for admission into this program.

### **PERIOD OF TRAINING**

The period of training is three years of not less than 48 weeks each year.

### **SELECTION PROCESS**

Residents are selected with no pre-determined quotas or bias to gender, religious affiliation, or ethnicity. Selection is based on a composite of dental school grades, grades on national tests, interviews, letters of recommendations, and personal attributes. Applicants apply through the PASS program and are screened by the Prosthodontic Residency Screening committee, consisting of the Program Director and two Residency Prosthodontic faculty members. These three individuals reviewed records independently and a candidate is offered an interview if two out of the three members recommend it. Candidates are notified of the available interview dates. An interview day consists of tours of the facilities, meeting with faculty and current residents, clinical observation and lunch. At the conclusion of the interviews, the Program Director, faculty members and current residents discuss each candidate and a ranking is developed. The program does participate in the MATCH process.

### **AUTHORIZED ABSENCES**

Residents are allowed ten days off per school year for any reason: i.e. vacation, personal time, illness, medical or religious reasons. Requests for leave will be authorized, subject to approval by the Director of the Prosthodontic Residency, as long as there is minimum conflict with the training schedule. Any additional days, away from the program, will necessitate an additional period of time at the end of the three years. Residents are required to be present during all scheduled hours unless excused by the Program Director.

## **TRAINING SUPERVISION**

The program was fully accredited by the American Dental Association and the Commission on Dental Accreditation in 2018 without any recommendations. The Prosthodontic residents are under the direct supervision and guidance of the Director of the Program and trained prosthodontists. Resident progress is closely monitored and evaluated by oral and written methods. Resident/mentor counseling sessions allow for close communication between the resident and the program director.

## **ACADEMIC DUE POLICY PROCESS**

Voluntary or involuntary withdrawal, probation or termination of residency status is governed by the rules of the Dental School. To avoid any misunderstandings concerning the consequences of unacceptable resident performance or behavior, each resident should be familiar with this policy below, prior to enrollment.

All matters of professional ethics and conduct that involve ADE students will be referred to the Judicial Board of the Dental School for adjudication. The ethical and conduct standards for students enrolled in ADE programs are identical to the standards of conduct for students enrolled in the pre-doctoral and dental hygiene programs. Judicial Board matters are not governed by the policy contained in this document. An Advanced Dental Education student who believes he or she has been harassed on the basis of his/her sex shall be referred to the UMB Policy on Sexual Harassment of Students, VI-1.20(B).

### I. Academic Standards

A. Students in ADE Programs are expected to maintain high levels of academic success. Academic dismissal from an ADE Program can result from failure to achieve a Program's requirements or failure to meet minimal levels of academic achievement as they are defined in the Catalog of the Baltimore College of Dental Surgery. Clinical competence in all areas of patient management and treatment constitutes a vital sector of academic achievement. A student must maintain a B (3.0) or better overall average to remain in good standing. If the student's performance falls below this level of performance he/she will be placed on academic probation during the following semester. In the event that the student's overall average remains below a 3.0 at the end of the semester of probation, he/she will be dismissed from the Program. All failing and incomplete grades must be rectified before a certificate is conferred.

B. Faculty will provide feedback to students in all matters related to didactic and clinical performance. This feedback can be oral or written, but must be in writing, at appropriate intervals, as determined by each Program's accreditation standards noted under "Evaluation." Program directors will ensure that each ADE student receives a copy of the Program's Accreditation Standards as part of the program orientation for new residents.

## II. Unsatisfactory Performance

A. Unsatisfactory performance in knowledge, skills, clinical competence and/or patient management may be documented in several ways, and corrective actions or sanctions can range from oral or written counseling to dismissal from the Program. The process for such actions is as follows:

1. Initial notification of a deficiency/problem can be addressed orally by the program director or the faculty identifying the problem. After so doing, a dated notation will be placed in the student's file by the program director.

2. Should the problem continue, or new problems develop, the student will be sent a letter or counseling form by the program director, identifying the deficiency/deficiencies and required actions to be taken by the student to correct the deficiency/deficiencies. A time period for correcting the deficiency/deficiencies will be specified. A copy of the counseling form will be kept in the program or course director's file, and a copy will be sent to the Assistant Dean for Research and Graduate Studies. The student should acknowledge receipt of the letter or counseling form by signing the original and returning it to the program director. The letter or counseling form will be placed in the student's file. The student should keep the copy for future reference.

3. Should student performance still not improve, the program director, or program's designate acting in (his/her) stead, will notify the student in writing that he/she will be placed on academic probation. Actions required of the student and a time line (not exceeding those of academic probation noted above) to correct the deficiency/deficiencies will be detailed in the letter. The student must sign the letter, keep a copy for his/her files and return the original letter to the program director, who will place the letter in the student's file. Copies will be sent to the department chair and the Assistant Dean for Research and Graduate Studies.

4. If the student fails to rectify the deficiency/deficiencies in the time specified, the program director, in consultation with the program faculty, will recommend dismissal from the program to the department chair, the Assistant Dean for Research and Graduate Studies, and the Advanced Dental Graduate Education (ADGE) Committee. The ADGE Committee will review the recommendation for dismissal.

## III. Review

A. The student will be given the opportunity to be heard by the ADGE Committee on the recommendation for dismissal by offering his/her own statements, and, if appropriate, testimony of witnesses and presentation of evidence. The ADGE Committee may choose to call for further testimony and documents. Hearsay evidence is admissible only if corroborated. Any irrelevant or unduly repetitive evidence will be excluded. If the student fails to appear for his/her hearing without good cause, he/she will be deemed to have waived his/her right to meet with the ADGE Committee.

B. Following its review and any subsequent meetings, the ADGE Committee will

conduct its deliberation and make a decision on the basis of a majority vote. If the ADGE Committee determines that the student should be dismissed, the recommendation will be forwarded to the Dental School's Faculty Council for action. In the case of dismissal decisions, the Assistant Dean for Research and Graduate Studies will notify the student in writing that he/she has been dismissed from the Program.

- C. The Assistant Dean for Research and Graduate Studies shall maintain the documentary evidence from the hearing for at least 4 years from the date of the hearing. The student may obtain a copy of the record upon paying the cost of reproduction.

#### IV. Appeals Process

A. In the event that the student elects to appeal the dismissal decision, the student may not take part in any academic or clinical activities of the program until and unless action on the appeal reverses the decision for dismissal.

B. If the student disputes the dismissal, he/she may contact the Program Director within five business days of notification of dismissal for informal discussion. Should the student remain dissatisfied, the student may file a formal appeal.

C. A student wishing to file a formal appeal of a dismissal decision must initiate the appeal process regarding dismissal from the Program within 10 business days of receiving the written notification. The appeal must be submitted in writing to the Assistant Dean for Research and Graduate Studies. The written appeal must include: the decision the student is appealing; the specific ground for the appeal (only newly discovered evidence or lack of due process); and the academic status that the student is requesting. The student may present and prioritize more than one alternative to dismissal from the Program.

D. The Assistant Dean for Research and Graduate Studies will review the appeal and designate a three person Appeals Panel. Faculty who have been substantially involved in this or any other decision or actions against the student prior to dismissal are excluded from the Panel. Where possible and practical, the Panel will consist of three members of the full-time faculty. The Assistant Dean for Research and Graduate Studies will appoint one of these three as Chairperson of the Appeals Panel.

E. The Chairperson will then schedule a meeting with the members of the Panel within 5 business days when possible or practical. The Panel will determine whether the student's written appeal meets the criteria outlined in C. and report their decision in writing to the Assistant Dean for Research and Graduate Studies. Should the Panel determine that an appeal lacks the required evidence, the appeal will be denied. In these circumstances, there is no further appeal.

F. If the Panel determines that newly discovered information, not originally considered by the ADGE Committee does exist, then the matter should be referred back

to the ADGE Committee for reconsideration.

G. If the Panel determines that there was a failure of due process, an appeal on the record will be heard. The decision of this Panel will be final. The student and the Assistant Dean for Research and Graduate Studies will be notified of the decision in writing.

Approved by Dental School Faculty Council: April 8, 2003

Approved by University Counsel: June 19, 2003

Approved by Dean: July 11, 2022

### **JUDICIAL POLICY**

The judicial policy is listed on the dental school's website.

### **COMPLAINTS TO THE COMMISSION ON DENTAL ACCREDITATION**

The Commission on Dental Accreditation will review complaints that relate to a program's compliance with the accreditation standards. The Commission is interested in the sustained quality and continued improvement of dental and dental-related education programs but does not intervene on behalf of individuals or act as a court of appeal for individuals in matters of admission, appointment, promotion or dismissal of faculty, staff or students.

A copy of the appropriate accreditation standards and/or the Commission's policy and procedure for submission of complaints may be obtained by contacting the Commission at 211 East Chicago Avenue, Chicago, IL 60611-2678 or by calling 1-800-621-8099 extension 4653.

## **RECORDS AND REPORTS**

The administrative responsibilities assigned to the resident are designed to enable them to gain the Competency necessary to manage a clinical practice or academic position upon completion of training. Each resident is required to prepare and submit daily records and reports to complete documentation of the program. Additional administrative responsibilities will also be delegated throughout the training.

## **LIBRARY FACILITIES**

A state of art medical/dental library is maintained which contains a diversified collection of current dental, medical and other pertinent reference books. The library contains approximately 2,300 periodical subscriptions and over 325,000 volumes. It ranks among the 20 largest health science libraries in the United States. In addition, the department maintains a complete set of the Journal of Prosthetic Dentistry as well as many other prosthodontic textbooks and journals. Book purchase requirements are kept to a minimum due to our vast resources. Residents are given MEDLINE access free of charge.

## **CLINICAL PHOTOGRAPHY**

Each incoming resident is required to have a digital clinical camera capable of photography from profile to 1/1. Photographic documentation of clinical and laboratory work is required.

## **SOCIETY MEMBERSHIP**

Active membership in professional organizations and societies is essential in maintaining high professional standards. Membership in the American Dental Association, American College of Prosthodontists, American Academy of Maxillofacial Prosthetics, Academy of Osseointegration, and the Maryland Chapter of the American College of Prosthodontists are highly recommended. Student membership rates are available at a considerable reduction in dues or are free.

## **MANDATORY TRAINING**

Residents are required to attend scheduled training such as CPR, Bloodborne Pathogens, Risk Management, HIPPA, Infection Control, and Hazardous Material handling as provided by the dental school.

## **FINANCIAL ADVANTAGES**

A work study program may fund up to \$12,500 per year for qualified residents. This amount varies from year to year. There is also a stipend available based on the residency 's excess revenue from the previous year. All photocopying is free of charge and to date, all research costs have been borne by the program. Equipment use is included in tuition and fees and includes the use of a variety of articulators. We currently have the following articulator systems: Hanau, Denar, Whip Mix, Panadent, SAM, Artex, and TMJ.

Costs of fabrication of table clinics, publication fees, local study club dinner meetings, and travel to a prosthodontic meeting each year are provided by the program, if funding is available. In addition, residents who present table clinics at a national meeting are eligible for travel funds.

## **JOURNAL SUBSCRIPTIONS**

Residents are strongly encouraged to subscribe to the Journal of Prosthodontics, Journal of Prosthetic Dentistry, International Journal of Prosthodontics, and the International Journal of Oral and Maxillofacial Implants. Selected articles are reviewed monthly from these and other journals. The Journal of Prosthodontics is a benefit of membership in the American College of Prosthodontists. Many of these journals are included in the membership fees of the above-mentioned organizations.

## **REQUIRED TEXTBOOKS**

Prosthodontic residents are expected to study and review the literature pertaining to prosthodontics. Residents should maintain a personal reference library of prosthodontic and related texts. The only highly suggested purchases are Beumer's Maxillofacial Textbook (if/when it is available for print) and Clinical Applications in Digital Dental Technology.

## **COMPUTERS**

All incoming residents will be required to have in their possession a laptop computer.

### **III. GOALS AND REQUIREMENTS**

#### **1ST YEAR RESIDENT:**

1. Competency and confidence in the application of basic fixed prosthodontic clinical and laboratory procedures.
2. Competency in basic complete denture clinical and laboratory techniques.
3. Understanding of complete denture occlusion.
4. Competency in basic RPD clinical and laboratory procedures.
5. Understanding of basic RPD principles, design and function.
6. Understanding with overdenture techniques.
7. Understanding with immediate denture techniques.
8. Understanding with reline/rebase techniques.
9. Competency in waxing techniques and restoration contouring.
10. Competency in single survey crown preparation and fabrication.
11. Competency in clinical applications of digital dentistry.
12. Competency in use of the semi-adjustable articulators, facebows and understanding with concepts of occlusion and fully adjustable articulators.
13. Understanding with basic tissue integrated prostheses techniques.
14. Understanding with diagnosis and treatment of patients with temporomandibular disorders and facial pain.
15. Identify a research project with a submitted protocol.
16. Understand the requirements of the American Board of Prosthodontics by the end of first year.
17. Prepare a lecture utilizing Power Point and clinical photographs/radiographs.

## **2ND YEAR RESIDENT:**

1. Competency in diagnosis and treatment planning with an understanding of the relationship of prosthodontics to the various specialties of dentistry in the comprehensive care of patients.
2. Competency and confidence in the treatment of combination cases involving fixed, removable, tissue integrated prostheses and the use of digital dentistry.
3. Competency in the application of the various concepts of occlusion for both fixed and removable and competency in the use of pantographic, stereographic and quick mount recorders, semi- and fully adjustable articulators.
4. Competency and confidence in the application of prosthodontic laboratory procedures.
5. Understanding with the prosthodontic literature and its support of and application to treatment.
6. Develop and present a table clinic at a professional dental meeting.
7. Have placed dental implants for their patients.

## **3rd YEAR RESIDENT:**

1. Understanding with the maxillofacial prosthodontic literature and with the treatment of patients with maxillofacial developmental or congenital defects.
2. Competency with the use of digital technology in diagnosing, planning and performing complex prosthodontic procedures.
3. Competency with intra-oral implants in their indications and use.
4. Competency in treating the full scope of prosthodontic patients.
5. Complete a Prosthodontic Board treatment and make a commitment to challenge the Board.
6. Complete a research project suitable for presentation and publication.
7. Display the ability to prepare and present lectures on selected prosthodontic topics to fellow residents.

## **GRADUATION:**

The following requirements must be met before a certificate is awarded from the residency program:

1. Satisfy all academic and clinical requirements as determined by the Program Director and CODA Standards.
2. Completed research project. The research paper must be ready to be submitted to a refereed dental journal.
3. Completed final write-up and casts for a Prosthodontic Board presentation case. Resident must have taken a Mock Board examination in all sections of Part B.

## **DIDACTIC OBJECTIVE AND GUIDELINES**

### **PROSTHODONTIC LECTURE SEMINARS:**

The prosthodontic lecture seminars are conducted once a week, for one and one-half hours from August through May. Material is presented from the following selected topic areas. Lectures will include Power Point/Keynote presentations, handouts, and any other items that will help convey the information. These lectures are given by residency staff, dental school professors, private practitioners, residents, and members of the Armed Forces stationed in the area. These include multiple specialties in addition to prosthodontics. The use of digital technology may be included in any or all of these presentations.

### **Fixed Prosthodontic Discussion Areas**

1. Diagnosis and Treatment Planning
2. Preparations
3. Soft Tissue Management
4. Impressions
5. Interim Restorations
6. Crown Contours, Pontics
7. Articulator Selection, Rehabilitation Techniques, Functionally Generated Path
8. Centric Position, Interocclusal Records

9. Mandibular Movement and Recording
10. Implants
11. Cementation, Failures
12. Ceramics
13. Temporomandibular Disorders
14. Endodontic Considerations, Build-ups and Posts

**Removable Partial Denture Discussion Areas:**

1. Introduction
2. Diagnosis and Treatment Planning
3. Design Principles
4. Components and Claspings
5. Distal Extension RPDs
6. Occlusion
7. Fitting and Insertion
8. Swinglock RPDs
9. Rotational Path
10. Miscellaneous

**Complete Denture Discussion Areas:**

1. Diagnosis and Treatment Planning
2. Impressions
3. Centric Relation Records

4. Vertical Dimension
5. Denture Occlusion
6. Anterior Tooth Selection and Esthetics
7. Overdentures
8. Immediate Dentures
9. Miscellaneous

**Maxillofacial Discussion Areas:**

1. Management of the Irradiated Head and Neck and Oncologic Patient
2. Prosthodontic Rehabilitation of Acquired Maxillary and Mandibular Defects
3. Prosthodontic Rehabilitation of Congenital and Developmental Defects
4. Palatopharyngeal Function, Disabilities, Speech Therapy and Speech Aids

**Implants:**

1. History
2. Diagnosis
3. Treatment Planning/Options
4. Materials

**Temporomandibular Dysfunction:**

1. Anatomy
2. Diagnosis
3. Treatment

**Other related topics:**

1. Periodontics
2. Endodontics
3. Oral and Maxillofacial Surgery
4. Orthodontics
5. Esthetics
6. Evidence Based Dentistry

## **RESIDENT LECTURE SEMINARS**

### **1. Objectives:**

- a) Provide formal instruction in a variety of topic areas relative to prosthodontics and related basic sciences. This presentation will include a Power Point/Keynote presentation and a written handout.
- b) Establish an In depth/Understanding knowledge as dictated with skills necessary in lecture preparation and presentation. Emphasis is on communicative ability development and subject content.
- c) Disseminate information pertinent to the training of specialists in prosthodontics.

### **2. Guidelines:**

- a) Residents will be assigned topics for presentation each academic year.
- b) Residents will lecture in rotation, one lecture during the first year, two in the second, and two or three in the final year.
- c) Each presentation will be evaluated by a member of the teaching staff.

## **STAFF LECTURE SEMINARS**

### **1. Objectives:**

- a) Provide formal instruction on a variety of prosthodontic subject areas.
- b) Disseminate information pertinent to the training of specialists in prosthodontics.

### **2. Guidelines:**

- a) Each mentor will select topics in their specialty for presentation to the residents.
- b) All lectures will include the latest advances in their specialty area.

## **BIOMATERIAL SCIENCE**

Biomaterial subjects are emphasized throughout the didactic and clinical phases of the residency and are integral to an In depth/Understanding of prosthodontics.

### **1. Objectives:**

- a) To develop an In depth/understanding of biomaterial science with emphasis on the clinical application of materials utilized in restorative dentistry and prosthodontics.
- b) Provide current information pertaining to the development of new materials/techniques in prosthodontics.

### **2. Guidelines:**

- a) Formal presentations in dental materials and statistics are given by members of dental school.
- b) Residents are assigned material topics for presentation and discussion throughout the year as part of the Lecture Seminar and Mock Board Question Review.
- c) A wide range of materials will be utilized by the residents in the clinical practice of prosthodontics.
- d) Supplemental knowledge will be provided by literature reviews, consultants and textbook assignments.

## **BIOMEDICAL SCIENCE SEMINAR:**

### **1. Objectives:**

- a) To provide the resident with sufficient knowledge of the basic sciences for appropriate application to prosthodontic principles and techniques.
- b) To prepare the resident for the written and oral portions of the American Board of Prosthodontics specialty certification exam in applied basic science.
- c) To encourage supplemental reading in scientific journals and basic science texts to provide a broader base for patient care.

### **2. Guidelines:**

- a) Residents are assigned representative questions in the basic sciences taken from past Mock American College of Prosthodontists written questions. Topic areas include: head and neck anatomy, growth and development, embryology, oral pathology, histology, biochemistry, pharmacology, microbiology, immunology, wound healing, and physiology.
- b) The questions are thoroughly researched and answered in a written format for reference by the staff and residents. The presentation will include a comprehensive discussion of the topic area as well as the specified answer to the question.
- c.) Seminar material will be supplemented by resident and staff lectures, consultants, and formal courses.
- d) Formal courses in Statistics and Research, Microbiology, Head and Neck Anatomy, Pain Mechanisms, Oral Pathology, and Oral Motor Skills are provided by their representative specialist from the dental school.

## **OCCLUSION COURSE**

This course is designed to provide the residents with the knowledge of occlusion and how it relates to the stomatognathic system at the in-depth level. There are 4 modules to this course, with corresponding laboratory components, running from July to December. The course is scheduled on Fridays from 1:00 to 5:00pm. The material is provided to the residents in lecture format with guest speakers covering topics of occlusion and related subjects. The residents are also exposed to a hands-on exercise on preliminary impressions and fabrication of diagnostic casts of their own mouth to be mounted on a semi-adjustable articulator. A hands-on waxing exercise and pantographic tracing exercise is scheduled during the introductory section. By the end of the course, the students are well prepared in sound principles and with an in-depth knowledge about philosophies and theories of occlusion, articulator systems and mandibular movements as well as sound criteria to make decisions about occlusal problems that face the specialty of prosthodontics.

### **1. Objectives:**

1. To introduce the residents to in depth knowledge of history, philosophies, and theories of occlusion and occlusal instruments and how they are applied to current concepts in prosthodontics
2. To introduce the residents to an understanding level of knowledge about the stomatognathic system and craniofacial structures and their interrelationship with patient's body.
3. To provide the residents the means to be proficient in the use of the instruments in the field of occlusion, ie. pantograph and electronic mandibular movement recording instruments (ie. Cadiax) and articulators.

### **2. Evaluations:**

Residents will be evaluated through formative exams given throughout each module. Lab exercise will be critically evaluated.

## **LITERATURE REVIEW SEMINARS**

### **1. Current Literature - Weekly**

Each resident will be assigned articles for review and discussion. The articles will be from the most recent issues of the Journal of Prosthetic Dentistry (JPD), Journal of Prosthodontics (JP), International Journal of Prosthodontics (IJP), International Journal of Oral and Maxillofacial Implants (JOMI), and selected articles from other major journals.

### **2. Classic Literature - Weekly**

Each resident will be assigned articles for review and discussion. The articles will be grouped by subject and arranged in notebooks so as to better understand the why of prosthodontics.

### **3. Objectives:**

- a) To maintain a current level of knowledge and understanding relating to recent advances in prosthodontic techniques and materials.
- b) To develop skills to critically evaluate scientific literature.
- c) Establish an awareness of research techniques and analysis.

### **4. Guidelines:**

- a) Each resident is responsible for presenting a summary of the selected articles from the above prosthodontic journals. Supplemental articles from other journals are also reviewed throughout the year.
- b) The presentation will include a statement of purpose, materials and methods, and summary of the results. The discussion will include a review of the statistical methods and relevance to the specialty of prosthodontics.
- c) The Prosthodontic staff will provide overall guidance in review and discussion and clarify technical/theoretical areas.

## **PRACTICE MANAGEMENT / ETHICS / ADMINISTRATION**

### **1. Objectives:**

- a.) Provide information on the administrative methods and requirements related to the practice of prosthodontics.
- b.) To expose residents to the process of entering private practice.
- c.) To expose residents to the process of becoming involved in an academic career.

### **2. Guidelines:**

- a.) Topics will be presented to include finding the right practice situation, patient management, workload reporting, assistant and laboratory management, and supply acquisition.
- b.) Seminars will be presented by private practitioners and academicians, who will discuss the how's and why's of entering that facet of prosthodontics.

## **VISITING CONSULTANTS AND GUEST LECTURERS**

Residents are required to attend presentations by visiting consultants and guest lecturers. Residents will also have the opportunity to attend selected consultant presentations at the Prosthodontic Program and at the Naval Dental School at Bethesda, Bethesda, MD. Residents will be assigned specific duties to support consultant's visits.

## **BASIC LIFE SUPPORT/MEDICAL EMERGENCIES**

The staff and residents must remain current in basic life support techniques. Classes leading to certification and renewal are provided by the Dental School.

## **RESEARCH PROJECT**

Each resident will be required to engage in an investigative project and complete a manuscript for publication as a requirement for graduation. Residents will coordinate the project with the Program Director and the research advisor.

### **1. Objectives:**

- a) To provide knowledge and understanding of scientific methodology, statistics, research design, and scientific writing.
- b) To create an atmosphere for better interpretation of scientific literature and a desire for continual study.

### **2. Guidelines:**

- a) Research may take the form of a clinical or laboratory investigation. Surveys are not sufficient to meet his objective.
- b) Residents will adhere to the listed time schedule in preparation of the research paper.
- c) The completed paper must be in a format acceptable for publication by the specified journal prior to graduation from the program.

## **POSTER PRESENTATIONS**

Residents will develop a technique or item of interest suitable for table clinic presentation twice during the program and present at a local or national meeting.

## **STANDARDS OF CARE EXAMINATION**

The Standards of Care examinations are formal evaluations of clinical performance for a specific series of patient treatment situations and are conducted on all patients throughout the program. Residents are graded on reference based procedure steps acceptable, as needing improvement, or unacceptable standards of care. The standards are an outcome assessment measure designed to evaluate teaching methods and the student's clinical performance and understanding of a comprehensive treatment procedure.

The areas of evaluation include:

- a) Fixed Prosthodontics
- b) Removable Prosthodontics
- c) Implant supported Prosthodontics Prostheses
- d) Temporomandibular Disorders
- e) Maxillofacial Prosthodontics

## **WRITTEN EXAMINATIONS**

Written examinations, patterned after the American Board of Prosthodontics Section A exam are given at least once a year a year. They are primarily designed to allow the resident to identify weak areas in recall and understanding of the material. As an outcome assessment measure, they also give the teaching staff important information on resident comprehension and allow for reinforcement in these selected areas. Third year residents, who successfully pass Section A of the American Board of Prosthodontics Certification Examination are exempt from this requirement.

## **ORAL EXAMINATION**

Two, one hour oral examinations are given twice a year and are patterned after Section B of the American Board of Prosthodontics exam. The exam is designed to assess the resident's knowledge and comprehension in the broad field of Prosthodontics and to help better prepare the resident to challenge the American Board of Prosthodontics examination. Each resident is required to take all three oral exams of Section B prior to graduation. Oral quizzes are given weekly, if not daily throughout the program.

## **RESIDENT TEACHING**

The opportunity for organized teaching experience exists throughout the program. The resident lecture presentations, demonstrations and "mentoring" of the new residents prepare them well for future teaching responsibilities. The poster presentation at a State or National level provides good exposure and experience to large audiences. The second year and third year residents teach in predoctoral clinics. The third year residents also present to the Maryland Section of the American College of Prosthodontists and to the residents and staff of the Navy's PG Prosthodontic Residency.

## **V. CLINICAL OBJECTIVES AND GUIDELINES**

### **FIXED PARTIAL DENTURE PROSTHODONTICS**

#### **1. Objectives:**

- a) Provide an in-depth knowledge of all aspects for the practice of fixed prosthodontics.
- b) Develop Competency in clinical and laboratory practice for a wide variety of fixed prosthodontic treatment situations.
- c) Develop an in depth level of knowledge and skill in the use of instruments, equipment, and materials related to fixed prosthodontics.
- d) Develop a working knowledge of the inter-relationship of fixed prosthodontics with other clinical specialties and laboratory technicians.

#### **2. Guidelines:**

- a) In-depth knowledge of fixed prosthodontics will be accomplished through formal lectures (staff, resident, visiting consultant), practical exercises/demonstrations, national and local meetings, and topic seminars. Textbook and current literature assignments will supplement the instruction.
- b) Clinical Competency will be developed through the practical application of didactic knowledge to a wide variety of patient treatment situations. Patients are assigned with increasingly more complex requirements and a practical problem solving approach is emphasized. Laboratory competency will be developed through practical exercises and demonstrations by the staff and laboratory technicians. First year residents will perform all related laboratory procedures until competency has been demonstrated to the teaching staff. A variety of articulators will be utilized.
- c) Knowledge and skill in the use of instruments, equipment and materials will be developed through practical exercises/demonstrations, topic seminars, and their use in clinical and laboratory patient treatment exercises.
- d) Interaction with other clinical specialties will be accomplished through scheduled joint treatment planning seminars, formal lectures, and the day-to-day referral of each resident's patients.

## **REMOVABLE PARTIAL DENTURE PROSTHODONTICS**

### **1. Objectives:**

- a) Establish an in-depth understanding and knowledge of all aspects of Removable Partial Denture Prosthodontics.
- b) Develop advanced clinical capability in treatment planning, preparation, and placement of a wide variety of removable partial dentures.
- c) Develop an understanding and capability to analyze and design partial denture frameworks based on accepted rationales. Instruct in the transference of design criteria to the dental laboratory technician for fabrication of the prosthesis.
- d) Develop a thorough working knowledge of all laboratory procedures related to removable partial denture prosthodontics.
- e) Develop a working knowledge of the relationship between other clinical specialties and removable partial denture prosthodontics.

### **2. Guidelines:**

- a) In-depth knowledge of removable partial denture prosthodontics will be accomplished with lecture presentations (staff, resident, visiting consultants) and through practical exercises/demonstrations, national meetings, and literature reviews.
- b) Staff and laboratory personnel will coordinate practical exercises and demonstrations to develop Competency in laboratory technique. The residents will accomplish all related laboratory procedures in conjunction with patient care until satisfactory Competency is demonstrated.
- c) The accomplishment of advanced levels of clinical practice in a range of clinical situations will be emphasized, with didactic knowledge providing a foundation for rational treatment.
- d) Joint treatment planning sessions will be structured to provide interaction between clinical specialties.

## **COMPLETE DENTURE PROSTHODONTICS**

### **1. Objectives:**

- a) Establish an in-depth knowledge of all aspects of complete denture prosthodontics.
- b) Develop clinical expertise in patient care at a specialty level of Competency.
- c) Develop a thorough knowledge of all aspects of patient referral to allied specialties.
- d) Become proficient in the fabrication of implant supported prostheses both fixed and removable.

### **2. Guidelines:**

- a) In-depth knowledge of complete denture prosthodontics will be established through lecture presentations (staff, resident, consultant), practical / exercise/ demonstrations, and by literature reviews.
- b) Practical exercises and demonstrations will be utilized to develop expertise in all phases of clinical and laboratory fabrication of complete dentures. First year residents will perform all related laboratory tasks until Competency is demonstrated.
- c) The clinical practice of advanced complete denture prosthodontics will include experience in overdenture fabrication, fabrication of single complete dentures, immediate dentures (including all surgical phases), and opposing complete dentures. A variety of denture occlusions will be utilized to allow for rational selection of occlusal schemes based on individual clinical situations.
- d) Interaction with other clinical specialties will be accomplished through scheduled joint treatment planning sessions related to pre-prosthetic surgery, implant surgery, maintenance, and other clinical specialties as appropriate.

## **MAXILLOFACIAL PROSTHETICS**

### **1. Objectives:**

- a) To have an understanding of the cancer disease process and cancer treatment modalities.
- b) To understand the importance of a multidisciplinary approach to treatment of patients with maxillofacial defects.
- c) To have experiences in the treatment of acquired maxillary and mandibular defects.

### **2. Guidelines:**

- a) Completion of a maxillofacial prosthetic course during the 2<sup>nd</sup> or 3<sup>rd</sup> year of the program.
- b) To treat a maxillofacial patient.

## **IMPLANT PROSTHODONTICS**

### **1. Objectives:**

- a) Provide an in-depth knowledge of all aspects of the practice of implant prosthodontics.
- b) Develop competency in clinical and laboratory practice for a variety of implant prosthodontic treatment situations.
- c) Develop a high level of knowledge and skill in the use of instruments, equipment, and materials.
- d) Develop a working knowledge of the interrelationship of implant prosthodontics with other dental specialties.
- e) Experience implant placement as a prosthodontic procedure.

## 2. **Guidelines:**

- a) In-depth knowledge of implant prosthodontics will be accomplished through formal lectures (staff, resident, visiting consultants), practical exercises/ demonstrations and topic seminars. Textbook and current literature assignments will supplement the instruction.
- b) Clinical Competency will be developed through the practical application of didactic knowledge to a variety of edentulous and partially edentulous patient treatment situations. Residents will also attend the Prosthodontic/Periodontic/OMFS Conferences. Laboratory competency will be developed through practical exercises and demonstrations by the staff and laboratory technicians. Residents will perform all related laboratory procedures until competency has been demonstrated to the teaching staff.
- c) Knowledge and skill in the use of instruments, equipment and materials will be developed through clinical and laboratory patient treatment exercises.
- d) The prosthodontic resident will design and fabricate a surgical guide for all cases. The resident will coordinate stage 1 surgery with the surgeon and provide them with the surgical guide prior to surgery. In addition, the resident will place implants on selected patients.
- e) Interaction with other clinical specialties will be accomplished through scheduled joint treatment planning seminars, formal lectures and the day-to-day referral of each resident's patients.

## **IMPLANT SURGICAL PLACEMENT**

### **1. Objectives:**

- a) Develop competency to clinically assess a patient's suitability for implant therapy. To assess any physical, systemic or medical limitation that could complicate implant surgical placement.
- b) Develop a strong background in implant treatment planning in order to provide the partially edentulous and edentulous patient with the best standard of care. This will include the use of digital technology.
- c) Develop a comprehensive treatment plan. All available treatment options must be presented to the patient prior to initiating therapy. To ensure the patient is fully informed about other treatment options, indications, contra-indications, advantages and disadvantages of using implant therapy.
- d) Develop competency in evaluating and interpreting radiographic imaging of the mandible and the maxilla. Determine pre-surgical anatomical and prosthodontic considerations prior to implant placement.
- e) Develop a competency level to perform implant surgery using aseptic surgical techniques including: socket preservation, raising mucoperiosteal flaps, guided bone regeneration and suture placement
- f) Develop a competency level to use appropriate implant selection, grafting materials, barriers, pharmaceutical agents and pre-operative and post-operative medications following implant surgery.
- g) Develop competency in managing possible surgical complications

### **2. Guidelines:**

- a) In-depth knowledge of implant placement will be accomplished through formal lectures (staff, resident, visiting consultants), practical hands-on exercises, demonstrations, national meetings, and topic seminars. Textbook and current literature review assignments will supplement the instruction.
- b) Clinical Competency in pre-surgical and post-surgical care will be developed through the practical application of didactic knowledge to a variety of cases.
- c) Knowledge and skill in the use of instruments, equipment, implant systems, implant planning software and guided bone regeneration materials will be developed through clinical patient treatment exercises. Digital technology will be utilized to help diagnosis, plan, and fabricate surgical guides (including bone reduction guides) to better treat their patients. Residents will be expected to use the latest technology on all their patients.
- d) Interaction with other clinical specialties will be accomplished through scheduled joint treatment planning seminars with periodontics, orthodontics and OMFS and day-to-day referrals from the various dental clinics.

## **TREATMENT PLANNING CONFERENCE**

This treatment planning conference is held for patients with unusual, multi- disciplinary or complex treatment situations. They are presented for evaluation and review.

### **1. Objectives:**

- a) To develop an understanding of the orderly, detailed and comprehensive evaluation of a patient and the development of an accurate diagnosis and logical treatment plan.
- b) Provide a vehicle for interaction with the major dental specialties in the treatment planning process.
- c) Develop concepts of alternative treatment and appropriate application of a variety of treatment concepts and techniques.
- d) Provide a format for formal treatment plan presentation.

### **2. Guidelines:**

- a) Comprehensive treatment plans will be developed based on clinical and radiographic examination, articulated diagnostic casts, scans, and pertinent laboratory tests.
- b) Formal oral presentations will be made to the combined prosthodontic and specialty staff, as needed. The presentation will include clinical photos, history, clinical exam, articulated diagnostic casts (pre-op and diagnostic waxing), and a primary and alternative treatment plan.
- c) A consensus treatment plan will be formulated by the staff and residents. This treatment plan will be documented and presented to the patient by the resident.
- d) Follow-up care will be coordinated and monitored by the resident who formally presented the patient for evaluation.

## **CONJOINT SEMINAR**

### **1. Objectives:**

- a) Develop a thorough Understanding with the clinical specialties of Periodontics, Endodontics, and Orthodontics.
- b) Establish a protocol for professional referral of patients for other therapies in conjunction with prosthodontic treatment.
- c) Maintain current awareness of techniques in other specialties as they relate to prosthodontic treatment.

### **2. Guidelines:**

- a) Understanding with the other clinical specialties will be accomplished by formal lectures by the various clinical specialty staff.
- b) Interaction with the other specialties will be provided by joint conferences, treatment planning sessions, and combined dental treatment.
- c) Selected current scientific journal articles will be assigned and reviewed to maintain an awareness of techniques and trends in other specialties.

## **PERIOPROS SEMINAR**

### **1. Objectives:**

- a) Develop a thorough Understanding with the clinical specialties of Periodontics.
- b) Establish a protocol for professional referral of patients for periodontal therapy in conjunction with prosthodontic treatment.
- c) Maintain current awareness of techniques in periodontics as they relate to prosthodontic treatment.

### **2. Guidelines:**

- a) Understanding advanced in periodontics and how they relate to prosthodontics will be accomplished by formal lectures by the various clinical specialty staff.
- b) Interaction with periodontics will be provided by joint conferences, treatment planning sessions, and combined dental treatment.

- c) Selected current scientific journal articles will be assigned and reviewed to maintain an awareness of techniques and trends in periodontics.

## **VI. LABORATORY OBJECTIVES AND GUIDELINES**

### **PROSTHODONTIC LABORATORY PROCEDURES**

#### **A. Objectives:**

1. Develop a level of competency in analog and digital laboratory aspects of prosthodontic treatment.
2. Develop the ability to manage and train ancillary personnel or semi-skilled technicians in all prosthodontic laboratory procedures.
3. Develop a working knowledge of the administrative procedures required to run a laboratory.

#### **B. Guidelines:**

1. The first year resident will complete all laboratory procedures for patients they are treating until demonstrated competency is reached.
2. The second and third year residents may utilize the clinic laboratory or send their cases to private laboratories, except for removable work that will be done by the resident.

## **VII. STANDARDS TO ASSESS OUTCOMES**

Purpose and objectives of the Prosthodontic Residency Program:

### **A. Planning and Evaluation Process**

The planning and evaluation process of the prosthodontic program encompasses a broad based involvement of the faculty and administration. The program director, faculty, and current and past residents have input into the planning and evaluation process. Specific guidance is obtained from the American Dental Association, Standards for Advanced Specialty Education Programs in Prosthodontics. Additionally, a semi-annual mentors conference sponsored by the American College of Prosthodontists provides for an update on a variety of applicable topics.

### **B. Mentor Evaluation of Resident**

1. The residents are evaluated by the mentors using both qualitative and quantitative criteria.
  - a. Qualitative - (Pass - Fail)
    - 1) Meets Program Standards
    - 2) Fails to Meet Program Standards
  - b. Quantitative - (Letter grades)  
A = Outstanding  
B = Satisfactory  
C = Unsatisfactory  
I = Incomplete
2. Reports and test results that are done throughout the year.
  - a. **Residents Evaluation Report** - A quarterly report on each resident assessing academic, clinical, and personal performance.
  - b. **Presentation Reports** - Critiques will be done by the mentors after each resident presentation. Approximately 8 per year.
  - c. **Mock Boards** - Comprehensive written and oral examination and patient presentation. Two times a year.
  - d. **Course grades** - Results of formal didactic courses.

- e. **Periodic Quizzes** - Designed to determine if students are learning and retaining new material.
- f. **Periodic Oral Challenges** - Designed to help determine how well students are grasping new concepts and ideas.

### **C. Assessment of Resident Clinical and Academic Achievement**

- 1. **Knowledge Outcomes:** Understanding general facts specific to a particular field; understanding processes, theories, and methodologies.

#### **Methods of Assessment:**

- a. Results of written exams
- b. Results of oral exams
- c. Results of oral presentation evaluations
- d. Results of Standards of Care Evaluations by mentors
- e. Results of quarterly written reports by mentors

- 2. **Skills Outcomes:** Attainment of academic, communication, leadership/interpersonal, vocational, manual, and other skills.

#### **Methods of Assessment:**

- a. Results of Standards of Care evaluation by mentors
- b. Results of oral presentation evaluations
- c. Results of quarterly written reports by mentors

- 3. **Values and Beliefs:** Development of effective characteristics appropriate to a graduate of the program. Development of a format to assess the attitudes and satisfaction of residents in regard to their program.

#### **Methods of Assessment:**

- a. End of year critique by residents
- b. End of year evaluation of residents by faculty
- c. End of program critique by residents
- d. One year post graduation critique by former residents
- e. Results of written consultant evaluations
- f. Results of quarterly written reports by mentors

4. **Relationships/Behavioral Measures:** Achievement of a productive and cooperative mentor/resident relationship; compatible clinician/dental assistant or laboratory technician relationship.

**Methods of Assessment:**

- a. Academic probation rates
- b. Attrition/withdrawal rates
- c. Success of candidates in obtaining specialty board certification
- d. Results of one year post-graduation critique
- e. Results of five year post-graduation critique

**FIXED PROSTHODONTICS**  
**(Standards of Care)**

**A. Medical-Dental History and Treatment Plan:**

A thorough and complete medical and dental history is obtained from the patient and the patient's dental record to include required medical and/or dental consultations. Any medical or dental conditions are considered in the treatment plan. The plan is based on sound prosthodontic procedures. The resident is technically capable of completing the proposed plan with staff supervision. The patient is in agreement with the plan and understands the time required to complete it.

**B. Diagnostic Casts:**

Are accurate, clean, bubble-free reproductions of the existing dental anatomy. Casts should be properly related on an appropriate articulator.

**C. Anesthesia:**

Local anesthetic should be administered correctly, gently, and in proper amounts so that the prosthodontic procedure can be completed in a pain free environment.

**D. Preparations:**

Should be completed to provide for proper retention and resistance form and to provide adequate thickness of metal and/or porcelain to develop optimal occlusion, contours, and esthetics.

**E. Retraction:**

Retraction of soft tissues should be accomplished gently with a minimal of trauma to the gingival tissue. All tooth margins should be exposed and all hemorrhage controlled.

**F. Final Impressions:**

Must have an accurate, non-distorted reproduction of all required dental structures with clearly defined, void-free margins of all tooth preparations.

**G. Jaw Relation Records:**

Records should accurately reproduce centric relation occlusion when working casts are articulated. Records should be of an appropriate material to allow handling by laboratory personnel without distortion or fracture.

## **H. Provisional Restorations:**

Provisional crowns or fixed partial dentures of an acceptable material should be placed on all preparations to cover exposed dentin. Contours and contacts should promote gingival health and maintain tooth position. Occlusion should be comfortable and adequate to prevent eruption of opposing dentition or preparations. Esthetics of anterior provisional restorations should be acceptable within the limitations of the material used.

## **I. Laboratory Procedures:**

1. Working casts should be trimmed, smoothed, and free of all bubbles and voids. Land areas of working casts should be trimmed and rounded.
2. Dies are to be trimmed in a manner prescribed by the Fixed Prosthodontic mentor in order to expose and clearly delineate all margins. Margins are to be marked with red pencil. Die spacer in the appropriate thickness should be applied to all dies to within 1mm of the margin. Casts should be articulated prior to placing die spacer when an interocclusal record is used.
3. Articulating Indices: All jaw relation records should be trimmed so that cusp tips only occlude with the record and in such a way that the laboratory technician can assure that all teeth fit the record. Occlusal indices should be marked on both maxillary and mandibular casts with colored pencil or cut with a separating disk.
4. Prescription Forms: All laboratory prescription forms should be completed to include appropriate information. All prescription forms going to another laboratory must be countersigned by a prosthodontic mentor and logged in.

## **J. Try-In:**

1. Margins: All crown margins should be closed as is reasonably and clinically detectable by use of an explorer.
2. Contours: All crown contours should replicate the patient's ideal natural tooth as closely as possible. Crowns should be measured buccal-lingually and cusp to cusp to prevent overcontouring.
3. Contacts: Contact should not allow the easy passage of dental floss. Lack of contact (if applicable) constitutes a remake or the addition of porcelain or solder.
4. Occlusion: All restorations should restore the proper occlusal plane of the

patient. This may include recontouring or restoration of the opposing dentition or prostheses. All prostheses should contact in centric occlusion or maximum intercuspation to hold shim stock (12mu) firmly. All non-restored teeth both ipsilateral and contralateral should also hold shim stock firmly. Restorations should be free of lateral interferences in accordance with the patient's occlusal scheme, i.e., group function, canine disclusion, etc.

5. Shade: Porcelain shades should be esthetically acceptable to the patient.
6. Porcelain Characterization: Extrinsic coloration will be added to porcelain restorations as required to more closely match the natural dentition. Porcelain restorations should be glazed without vacuum to the appropriate smoothness and finish and match the patient's dentition. Porcelain may be polished instead of glazed in small areas.
7. Polish: All metal surfaces are to be free of scratches and oxidation, and be smoothed and highly polished prior to cementation.

**K. Cementation:**

Final restorations are to be cemented with an appropriate cement as outlined by the mentors. All excess cement must be removed prior to dismissal of the patient.

**L. Patient Management:**

All patients in Prosthodontics should be treated in accordance with the highest professional standards. Derogatory comments or negative comments will not be made. Any questions concerning patient treatment should be discussed in private with the appropriate mentor.

**M. Time Management:**

Residents should pre-plan all prosthodontic treatment prior to their rotation day. Residents should arrive on time, begin treatment promptly, and complete treatment in an expeditious manner. All laboratory procedures should be accomplished to allow the laboratory technicians ample time to meet the delivery date.

**N. Standards of Care:**

All patients will be evaluated using the appropriate standards of care form.

**FIXED PROSTHODONTICS**

**STANDARDS OF CARE EVALUATION FORM**

Resident's Name \_\_\_\_\_

Patient's Name \_\_\_\_\_

Month \_\_\_\_\_

Procedure \_\_\_\_\_

	<b>Acceptable</b>	<b>Needs Impr.</b>	<b>Unacceptable</b>
1. Patient's Medical & Dental History & Treatment Plan	_____	_____	_____
2. Diagnostic Casts	_____	_____	_____
3. Anesthesia	_____	_____	_____
4. Preparations	_____	_____	_____
5. Retraction	_____	_____	_____
6. Final Impressions	_____	_____	_____
7. Jaw Relation Records	_____	_____	_____
8. Provisional Restorations	_____	_____	_____
9. Laboratory Procedures			
a. Casts:			
1) Bubbles, dust, voids	_____	_____	_____
2) Periphery trimmed	_____	_____	_____
3) Positional record	_____	_____	_____
4) Articulated casts	_____	_____	_____
5) Custom incisal guide	_____	_____	_____

	<b>Acceptable</b>	<b>Needs Impr.</b>	<b>Unacceptable</b>
b. Dies:			
1) Axial reduction	_____	_____	_____
2) Occlusion reduction	_____	_____	_____
3) Taper of Preparation	_____	_____	_____
4) Trim of dies	_____	_____	_____
5) Margins marked	_____	_____	_____
6) Stability of dies	_____	_____	_____
c. Laboratory Prescription:			
1) Patient data	_____	_____	_____
2) Facial margin type	_____	_____	_____
3) Special instructions	_____	_____	_____
10. Try-In:			
a. Margins	_____	_____	_____
b. Contours	_____	_____	_____
c. Contacts	_____	_____	_____
d. Occlusion	_____	_____	_____
e. Shade	_____	_____	_____
f. Characterization	_____	_____	_____
g. Polish	_____	_____	_____
11. Cementation	_____	_____	_____
12. Patient Management	_____	_____	_____
13. Time Management	_____	_____	_____

**Treatment Assessment**

- 1. Acceptable \_\_\_\_\_
- 2. Needs Improvement \_\_\_\_\_
- 3. Unacceptable \_\_\_\_\_

**Performance Standard Assessment**

Resident: \_\_\_\_\_

Mentor: \_\_\_\_\_

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

**COMMENTS:**

# REMOVABLE PROSTHODONTICS

(Standards of Care)

## 1. Patient History and Treatment Plan

- A. An adequate history is obtained from the patient and required medical and dental consultations have been obtained. All necessary radiographs are present and diagnostic.
- B. The patient's medical conditions and past dental history will be considered in the treatment plan and the plan based on sound prosthodontic procedures. The resident will have discussed options and possible complications. The patient should be in agreement with the plan and the time table to complete it.

## 2. Diagnostic Casts

Casts will be accurate, bubble-free reproductions of the required structures and properly articulated when required. Casts will be surveyed and a tentative removable partial denture design drawn on the lab prescription form. The final design will be approved by a mentor.

## 3. Preparations

Rest preparations and tooth modifications should be carried out with sound prosthodontic principles in mind, following the proposed design. The amount of tooth structure removed should provide for the desired support, retention, and stabilization of the removable partial denture or overdenture as well as proper thickness for development of occlusion and esthetics. Preparations should be checked by the mentor before final impressions.

## 4. Final Impressions

The final impression must include all the desired anatomical structures needed in the construction of the prosthesis and must be accurate and distortion free. Border extensions and tissue pressure should be in accordance with the impression technique used.

## 5. Final Casts

All final casts must be neat and free of bubbles and voids with land areas smoothed. The RPD master cast will be properly tripoded and borders of the desired major connectors may be marked. Prescription forms with neat, legible removable partial denture designs and instructions will be countersigned by a prosthodontic mentor prior to being sent to the laboratory.

## 6. **RPD Framework Try-In**

The completed framework should be evaluated prior to the try-in. The framework must completely seat without rocking. The fit of all components, the retention, and the occlusion must be verified in the mouth.

## 7. **Centric Jaw Relation Records**

Record bases must be accurate and stable. Jaw relation records must accurately record the appropriate centric position at the proper occlusal vertical dimension. An appropriate material should be used and the record must be reproducible. A facebow will be used. Acceptable anterior and posterior shades and molds should be selected and included with the design and other necessary information on the prescription form.

## 8. **Wax Try-In**

The correct centric relation position, occlusal vertical dimension, lip support, mid line, occlusal plane and phonetics should be verified. The size, shape, shade, and arrangement of the anterior teeth should be accepted by the patient and the doctor.

## 9. **Insertion**

All acrylic surfaces must be free of sharp projections or edges. Tissue bearing surfaces must be evaluated with Pressure Indicator Paste and the proper border extensions verified. The occlusion should provide uniform contacts in excursive movements and the principles of a definite occlusal scheme should be identifiable. The cameo surface of the prosthesis should be properly contoured and highly polished.

## 10. **Home Care Instructions and Post Insertion Care**

The patient must be given the appropriate wearing, care, and cleaning instructions. Adequate follow-up appointments must be scheduled to verify the fit, occlusion, and the patient's management of the prosthesis.

## 11. **Laboratory Relines/Rebases; Corrected Casts**

An accurate impression must be made at the proper occlusal vertical dimension. The framework must be completely seated.

## 12. **Patient Management**

All patients must be treated in accordance with the highest professional standards.

### 13. **Time Management**

All clinical procedures should be preplanned, discussed, and approved by the mentor. Residents should arrive on time, begin treatment promptly, and complete treatment in an expeditious manner. All laboratory procedures should be accomplished to allow the laboratory technicians ample time to meet the delivery date.

### 14. **Laboratory Procedures**

Impression trays should be smooth and extended in accordance with the technique being used. The record base should be free of all sharp edges and must be accurate and stable. The tooth set-up must be in accordance with the principles of the occlusal scheme being used. The processed prosthesis should be dense and have no more than 1.5 to 2mm pin opening at the lab remount. The finished prosthesis should be highly polished with no sharp edges, blebs, or flash.

### 15. **Standards of Care**

All patients will be evaluated using the appropriate standards of care form.

**REMOVABLE PARTIAL DENTURES  
STANDARDS OF CARE EVALUATION FORM**

Resident \_\_\_\_\_ Procedure \_\_\_\_\_

Patient's Name \_\_\_\_\_

Month \_\_\_\_\_

	<b>Acceptable</b>	<b>Needs Impr.</b>	<b>Unacceptable</b>
1. Patient's History & Treatment Plan	_____	_____	_____
2. Diagnostic Casts	_____	_____	_____
3. RPD Design	_____	_____	_____
4. Rest Preparations	_____	_____	_____
5. Final Impressions	_____	_____	_____
6. Master Casts	_____	_____	_____
7. Framework Try-In	_____	_____	_____
8. Corrected Cast	_____	_____	_____
9. CJR	_____	_____	_____
10. Tooth Selection	_____	_____	_____
11. Wax Try-In	_____	_____	_____
12. Insertion	_____	_____	_____
13. Post Operative Tx	_____	_____	_____
14. Patient Management	_____	_____	_____
15. Resident Time Management	_____	_____	_____
16. Laboratory Reline, RPD	_____	_____	_____
17. Lab Procedures			
a. Impression Trays	_____	_____	_____
b. Record Base	_____	_____	_____
c. Tooth Set-up Anatomic	_____	_____	_____
d. Tooth Set-up Zero Degrees	_____	_____	_____
e. Processed Prosthesis	_____	_____	_____
f. Finished Prosthesis	_____	_____	_____

**REMOVABLE PROSTHODONTICS (Cont'd)**

**Acceptable      Needs Impr.      Unacceptable**

**Monthly Assessment**

**Performance Standard Assessment**

1. Acceptable \_\_\_\_\_

Reviewed: \_\_\_\_\_

2. Needs Improvement \_\_\_\_\_

Resident: \_\_\_\_\_

3. Unacceptable \_\_\_\_\_

Mentor: \_\_\_\_\_

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

**COMMENTS:**

**COMPLETE DENTURES**  
**STANDARDS OF CARE EVALUATION FORM**

Resident \_\_\_\_\_ Procedure \_\_\_\_\_

Patient's Name \_\_\_\_\_

Month \_\_\_\_\_

	<b>Acceptable</b>	<b>Needs Impr.</b>	<b>Unacceptable</b>
1. Patient's History & Treatment Plan	_____	_____	_____
2. Preliminary Impressions	_____	_____	_____
3. Border molding	_____	_____	_____
4. Final Impressions	_____	_____	_____
5. Master Casts	_____	_____	_____
6. Location of vibrating line	_____	_____	_____
7. CJR	_____	_____	_____
8. Tooth Selection	_____	_____	_____
9. Wax Try-In	_____	_____	_____
10. Insertion	_____	_____	_____
11. Clinical Remount	_____	_____	_____
11. Post Operative Tx	_____	_____	_____
14. Patient Management	_____	_____	_____
15. Resident Time Management	_____	_____	_____
16. Lab Procedures			
a. Impression Trays	_____	_____	_____

	<b>Acceptable</b>	<b>Needs Impr.</b>	<b>Unacceptable</b>
b. Record Base	_____	_____	_____
c. Tooth Set-up Anatomic	_____	_____	_____
d. Tooth Set-up Zero Degrees	_____	_____	_____
e. Processed Prosthesis	_____	_____	_____
f. Finished Prosthesis	_____	_____	_____

**Monthly Assessment**

- 1. Acceptable \_\_\_\_\_
- 2. Needs Improvement \_\_\_\_\_
- 3. Unacceptable \_\_\_\_\_

**Performance Standard Assessment**

Reviewed: \_\_\_\_\_

Resident: \_\_\_\_\_

Mentor: \_\_\_\_\_

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

**COMMENTS:**

## **TEMPOROMANDIBULAR DISORDERS**

(Standards of Care)

### **1. Medical-Dental History and Treatment Plan**

A thorough and complete medical and dental history is obtained from the patient and the patient's dental record to include required medical and/or dental consultation. Any medical or dental conditions are considered in the treatment plan. The prosthodontic resident should be technically capable of diagnosing and completing the conservative treatment plan with staff supervision. The patient is in agreement with the plan and understands the time required to complete it.

### **2. Diagnostic Casts**

Are accurate, clean, bubble-free reproductions of the existing dental anatomy. Casts should be properly articulated on an appropriate articulator when indicated.

### **3. Jaw Relation Records**

The resident is capable of performing proper patient jaw manipulations in order to capture appropriate centric relation/occlusion positions. Records should accurately reproduce centric relation/occlusion when working casts are articulated. Records should be of an appropriate material to allow handling by laboratory personnel without severe distortion or fracture.

### **4. Laboratory Procedures**

Working casts should be trimmed, smoothed, and free of all bubbles and voids. Land areas of working casts should be trimmed and rounded. The resident should be capable of fabricating stabilizing (flat plane) occlusal splints, soft splints, and anterior jigs.

### **5. Prescription Forms**

All laboratory prescription forms should be completed. All prescription forms going to the lab must be countersigned by a Prosthodontic mentor. Prescriptions for medications will be monitored by the staff.

### **6. Occlusion**

All devices should restore the proper occlusal plane of the patient to restore VDO, protect the TMJ, or reduce myofascial pain. This may include recontouring of opposing dentition or splints. All devices should contact in centric relation occlusion or maximum intercuspation to hold shim stock (8mm) firmly. Devices should be free of lateral interferences in accordance with the patient's occlusal scheme, i.e., canine disclusion, group function, etc.

### **7. Delivery**

All devices should be smoothed and polished to be irritation free. Devices should be retentive with no movement during functional and para-functional excursions. Residents should provide the patient with instructions as to nature, usage, and care of all devices.

**8. Follow-up**

Residents should provide timely post-insertion visits for patients under splint therapy. All devices should be thoroughly inspected and evaluated as to their effectiveness and any needed adjustments made at this time.

**9. Patient Management**

All patients should be treated in accordance with the highest professional standards. Derogatory comments or negative comments will not be made. Any questions concerning patient treatment should be discussed in private with the appropriate mentor.

**10. Time Management**

Residents should preplan all conservative TMD treatment. Residents should arrive on time, begin treatment promptly, and complete treatment in an expeditious manner. All laboratory procedures should be accomplished to allow the laboratory technicians ample time to meet the delivery date.

**11. Standards of Care**

All patients will be evaluated utilizing the appropriate standard of care form.

**TEMPOROMANDIBULAR DISORDERS  
STANDARDS OF CARE EVALUATION FORM**

Resident's Name \_\_\_\_\_

Patient's Name \_\_\_\_\_

Month \_\_\_\_\_

Procedure \_\_\_\_\_

	<b>Acceptable</b>	<b>Needs Impr.</b>	<b>Unacceptable</b>
1. Patient's Medical & Dental History & Treatment Plan	_____	_____	_____
2. Diagnostic Casts	_____	_____	_____
3. Jaw Relation Records	_____	_____	_____
4. Laboratory Procedures			
a. Casts:			
1) Bubbles, dust, voids	_____	_____	_____
2) Periphery trimmed	_____	_____	_____
3) Centric	_____	_____	_____
4) Casts articulated	_____	_____	_____
b. Laboratory Prescription:			
1) Patient data	_____	_____	_____
2) Materials	_____	_____	_____
3) Special instructions	_____	_____	_____
5. Occlusion			
a. Occlusal Plane	_____	_____	_____
b. Contours	_____	_____	_____
c. Contacts	_____	_____	_____
d. Occlusal Scheme	_____	_____	_____
e. Polish	_____	_____	_____
6. Delivery	_____	_____	_____
7. Follow-up	_____	_____	_____
8. Patient Management	_____	_____	_____
9. Time Management	_____	_____	_____

**Treatment Assessment**

- 1. Acceptable \_\_\_\_\_
- 2. Needs Improvement \_\_\_\_\_
- 3. Unacceptable \_\_\_\_\_

**Performance Standard Assessment**

Resident \_\_\_\_\_

Mentor \_\_\_\_\_

Date \_\_\_\_\_

**COMMENTS:**

# MAXILLOFACIAL PROSTHODONTICS

(Standards of Care)

## 1. **Medical-Dental History and Treatment Plan**

A thorough and complete medical and dental history is obtained from the patient to include the pathology report and radiation/oncology report where indicated. Any medical or dental conditions such as radiation or chemotherapy are then considered in the treatment plan. The prosthodontic resident should be technically capable of completing the treatment plan with staff supervision. The patient is in agreement with the plan and understands the time required to complete it.

## 2. **Diagnostic Casts**

Are accurate, clean, bubble free reproductions of the existing dental and/or facial anatomy. Casts should be properly articulated on an appropriate articulator when indicated.

## 3. **Jaw Relations Records**

The resident is capable of performing proper patient jaw manipulations in order to reflect correct relations. Records should be of an appropriate material to allow handling by laboratory personnel without severe distortion.

## 4. **Laboratory Procedures**

Working casts should be trimmed, smoothed, and free of all bubbles and voids. Land areas of working casts should be trimmed and rounded.

## 5. **Prescription Forms**

All laboratory prescription forms should be completed. All prescription forms going to the lab must be countersigned by the maxillofacial prosthodontist.

## 6. **Devices**

All devices should restore the proper function and esthetics of the patient. This may include proper velopharyngeal function, mastication, swallowing, speech, or obturation.

## 7. **Delivery**

All prostheses should be smoothed and polished to be irritation free. Prostheses should be retentive with no movement during function, if possible. Residents should provide the patient with instruction as to the nature, usage, and care of all prostheses.

## 8. **Follow-Up**

Residents should provide timely post-insertion visits for patients under therapy. All prostheses should be thoroughly inspected and evaluated as to their effectiveness and any needed adjustments made at this time.

9. **Patient Management**

All patients should be treated in accordance with the highest professional standards.

10. **Time Management**

Residents should preplan all maxillofacial treatment. Residents should arrive on time, begin treatment promptly, and complete treatment in an expeditious manner. All laboratory procedures should be accomplished to allow the laboratory technicians ample time to meet the delivery date.

11. **Standards of Care**

All patients will be evaluated utilizing the standard of care forms.

**MAXILLOFACIAL PROSTHODONTICS  
STANDARDS OF CARE EVALUATION FORM**

Resident's Name \_\_\_\_\_

Patient's Name \_\_\_\_\_

Month \_\_\_\_\_

Procedure

	<b>Acceptable</b>	<b>Needs Impr.</b>	<b>Unacceptable</b>
1. Patient's Medical & Dental History & Treatment Plan	_____	_____	_____
2. Diagnostic Casts	_____	_____	_____
3. Final Impressions	_____	_____	_____
4. Jaw Relation Records	_____	_____	_____
5. Laboratory Procedures			
a. Casts:			
1) Bubbles, dust, voids	_____	_____	_____
2) Periphery trimmed	_____	_____	_____
3) Centric	_____	_____	_____
4) Casts articulated	_____	_____	_____
b. Laboratory Prescription:			
1) Patient data	_____	_____	_____
2) Materials	_____	_____	_____
3) Special instructions	_____	_____	_____
6. Occlusion			
a. Occlusal Plane	_____	_____	_____
b. Contours	_____	_____	_____
c. Contacts	_____	_____	_____
d. Occlusal Scheme	_____	_____	_____
e. Polish	_____	_____	_____
7. Delivery	_____	_____	_____
8. Follow-up	_____	_____	_____
9. Patient Management	_____	_____	_____
10. Time Management	_____	_____	_____

**Treatment Assessment**

1. Acceptable \_\_\_\_\_
2. Needs Improvement \_\_\_\_\_
3. Unacceptable \_\_\_\_\_

**Performance Standard Assessment**

Resident \_\_\_\_\_

Mentor \_\_\_\_\_

Date \_\_\_\_\_

**COMMENTS:**

## **IMPLANT SURGICAL PLACEMENT** (Standards of Care)

### **1. Review patient's Medical & Dental History and medication Interaction**

A thorough medical and dental history is obtained from the patient's dental record to include required medical and/or dental consultations with Periodontics, Endodontics, Oral Surgery, Oral Medicine, Orthodontics. Review of medical conditions that could make a patient unsuitable for implant treatment or could complicate surgery. Resident should be able to determine patient's medication interactions and need for medical consultation.

### **2. Diagnostic Articulated Casts**

Accurate, clean, bubble-free reproductions of the existing dental anatomy and surrounding soft tissue should be fabricated. Two sets of diagnostic casts, one set as pre-treatment record and a second set for diagnostic wax-up should be accurately articulated at the proposed vertical dimension of occlusion to reveal available mesial-distal, buccal-lingual, and interocclusal space for implant placement.

### **3. Diagnostic Waxing and Radiographic/surgical Guide**

Guides should indicate the desired location and inclination of implants during placement. Radiographic guides will be fabricated for every patient. For overdenture or hybrid prostheses, dentures will be fabricated to the wax stage to determine proper location of implants, type of abutments for stage 2, and ultimately the type of retention mechanism, i.e.: precision attachments, locator, ERA, etc. A surgical guide will be made based on this information. For partially edentulous prostheses, a complete waxing will be completed to determine contours of the final prosthesis, type of prosthesis to be fabricated, i.e.: cemented vs. screw retained, type of abutment for stage 2, etc.: Final position of implants will be based on these decisions. A surgical guide will be fabricated based on this information using conventional guide methods or Nobel Biocare guided surgery methods as needed. Digital technology is to be used when applicable and advantageous to the patient.

### **4. Diagnostic imaging**

Distortion-free intraoral radiographs should be taken. Appropriate imaging of the mandible and the maxilla, and interpret the findings to inform treatment. Use of cone beam CT is required and should be read with a help of planning software.

Evaluate surgical anatomy and/or pathological process of the maxilla, the mandible and the surrounding tissues.

Accurately identify location of vital structures: i.e. maxillary sinus, mandibular inferior alveolar canal, mental foramen, incisive canal.

Evaluate quality, quantity and morphology of the bone in possible implant

sites.

## 5. **Treatment Plan & Implant selection**

Upon presentation of photographs, articulated cast, diagnosis waxing and cone beam CT, a plan based on sound surgical and prosthodontic procedures will be formulated.

Prior to initiating therapy, a comprehensive treatment plan, including caries removal, disease control, periodontics, endodontics, etc. must be formulated. All available treatment options must have been presented to the patient prior to beginning therapy.

Know the principles and process of obtaining patient consent form prior to implant treatment: other treatment options, indications and contraindication, advantages and disadvantages.

At this point selection of surgical sites are made and surgical materials are ordered with 15 working days of anticipation. Please see Dental Implant Prosthetic Order Form and submit form to Mail Box Location-Rm.4453 to Rose Morgan at least 15 working days prior to scheduling the surgical procedure.

## 6. **Surgical Procedure**

Perform surgery following effective control of infection and principles of aseptic techniques, proper wear of surgical gowns, mask and sterilized non-latex gloves.

Proper medical management of patient, Blood Pressure must be taken at the beginning of each visit.

Practice appropriate record keeping, treatment plan consent, patient consent on day of treatment, axium notes on day of treatment.

Manage appropriate pharmaceutical agents and know interaction with existing medication/s. Understand prescription of pre-operative and post-operative medications- antibiotics, analgesics, anti-inflammatory, antihistamines/decongestants and anti-microbials, ie. Chlorhexadine gluconate oral rinse.

## 7. **Post-Surgical Period**

Understand the healing processes that normally occur following implant surgery- stage 1 vs. stage 2 procedures.

Identify early and late complications and do follow-up treatment as needed: i.e. 1 day after immediate placement, immediate loading, extraction and immediate delivery of prosthesis, 7 days after conventional implant placement.

Cover fixtures or healing abutments should be placed accordingly and if not visible clinically a final radiograph confirming seating of the abutment is needed.

## 8. **Phase 2 – Surgery**

Understand need for stage 1 or stage 2 surgical procedures. Transmucosal abutments will be placed at the appropriate time. Understand selection of mucoperiosteal flap, apical reposition flap or tissue punch for stage 2 procedures. Complete seating of the abutments to underlying fixtures must be verified radiographically, if not visible clinically.

**9. Home Care Instructions**

Instruct patient of surgical care, Coe-pack placement, use of reusable insulated cold pack, chlorhexidine rinse. A demonstration of the proper cleaning and care of the interim prosthesis must be given to the patient at the time of insertion. The patient should be given a follow-up appointment to evaluate and reinforce surgical care.

**10. Post-Surgical Care**

Following insertion of the implant placement, the patient must be seen in 1 day, 7 days or a 2 -week period depending on the type of surgery performed.

**11. Standards of Care**

All patients will be evaluated utilizing the appropriate standards of care forms.

**IMPLANT PROSTHODONTICS**  
(Standards of Care)

**1. Medical-Dental History**

A thorough medical and dental history is obtained from the patient's dental record to include required medical and/or dental consultations. Any medical or dental conditions are considered in the treatment plan.

**2. Diagnostic Articulated Casts and Radiographs**

Accurate, clean, bubble-free reproductions of the existing dental anatomy should be fabricated. Casts should be accurately articulated at the proposed vertical dimension of occlusion to reveal available mesial-distal, buccal-lingual, and interocclusal space for implant placement. Appropriate radiographs will be available. Measuring guides will be used and potential distortions understood.

**3. Treatment Plan**

A plan based on sound surgical and prosthodontic procedures will be formulated. Upon approval of the mentors, a treatment plan that the resident is technically capable of completing under staff supervision can be initiated.

#### **4. Diagnostic Waxing and Surgical Guide**

Guides should indicate the desired location and inclination of implants during Phase I placement. Surgical guides will be fabricated for every patient. For overdenture or hybrid prostheses, dentures will be fabricated to the wax stage to determine proper location of implants, type of abutments for stage 2, and ultimately the type of retention mechanism, i.e.: clips, locator, ERA, etc. A surgical guide will be made based on this information. For partially edentulous prostheses, a complete waxing will be completed to determine contours of the final prosthesis, type of prosthesis to be fabricated, i.e.: cemented vs. screw retained, type of abutment for stage 2, etc.: Final position of implants will be based on these decisions. A surgical guide will be fabricated based on this information.

#### **5. Phase I - Post Surgical Period**

Existing removable partial dentures or complete dentures should be relieved, adjusted, and relined with a soft liner to accommodate tissue changes within the surgical area. Functional forces to the implants should be eliminated or minimized during the initial phase of osseointegration.

#### **6. Phase 2 - Surgery/Preliminary Impressions**

- a. Transmucosal abutments will be placed at the appropriate time. Complete seating of the abutments to underlying fixtures must be verified radiographically, if not visible clinically.
- b. Accurate, clean, bubble free impressions with appropriate transfer analogs should be made after abutment connection is verified.

#### **7. Final Impression**

The final impression must be an accurate representation of the implant abutments or fixtures and surrounding tissues. A verification jig will be made at the impression appointment or from the master cast to verify the accuracy of the impression on prostheses of more than one tooth.

#### **8. Record Bases**

Base plates should be stable and accurate. When completely seated, they should have intimate contact to implant analogs, with no movement. Occlusion rims must be contoured to provide proper support to lips and surrounding tissues.

#### **9. Jaw Relation Records**

Jaw relation records should be made in centric relation at the established vertical dimension. For the hybrid prosthesis, there must be at least 12mm between the maxillary incisal/occlusal plane and mandibular edentulous ridge to allow adequate space for artificial tooth placement. A facebow will be used when indicated. Acceptable shades and molds should be selected.

10. **Wax Try-In**

The correct centric relation position, occlusal vertical dimension, lip support, midline, occlusal plane and phonetics should be verified. The size, shape, shade, and anterior arrangement should be accepted by the patient and doctor. For a hybrid type prosthesis, the mandibular anterior teeth should be above the transmucosal abutment and gold coping connections. The extension of the posterior occlusion beyond the center of the distal abutments should be in accordance with the number, size, location/configuration of the implants.

11. **Framework**

The casting for the super-structure must be evaluated to verify proper cantilever length and contours. The casting should seat completely, while passive, to all abutments. If not, the framework should be separated and soldered or remade. In the case of the partially edentulous the framework should be designed as best as possible to duplicate contours of normal anatomy. Adequate metal substructure for proper porcelain application on axial and occlusal surfaces must be present.

12. **Insertion**

The completed prosthesis must possess a passive, accurate fit to each abutment cylinder. A clinical remount procedure should be accomplished to eliminate occlusal interferences. All resin and metal surfaces should be highly polished without sharp projections. Access openings should be blocked out with suitable resin or composite material following final seating of the prosthesis.

13. **Home Care Instructions**

A demonstration of the proper cleaning and care of the implant prosthesis must be given to the patient at the time of insertion. The patient should be given a follow-up appointment to evaluate and reinforce home care.

14. **Post-Insertion Care**

Following insertion of the implant prosthesis, the patient must be seen every three (3) months for the first year and semi-annually thereafter for prophylaxis and recall.

15. **Standards of Care**

All patients will be evaluated utilizing the appropriate standards of care forms.

**IMPLANT PROSTHODONTICS  
STANDARDS OF CARE EVALUATION FORM**

Resident's Name \_\_\_\_\_

Patient's Name \_\_\_\_\_

Month \_\_\_\_\_

Procedure \_\_\_\_\_

	<b>Acceptable</b>	<b>Needs Impr.</b>	<b>Unacceptable</b>
1. Patient's Medical & Dental History	_____	_____	_____
2. Diagnostic Casts	_____	_____	_____
3. Treatment Plan	_____	_____	_____
4. Diagnostic Waxing/Surgical Guide	_____	_____	_____
5. Phase I Post Surgical Adjustments	_____	_____	_____
6. Phase II			
a. Abutment Placement	_____	_____	_____
b. Preliminary Impressions	_____	_____	_____
7. Final Impressions	_____	_____	_____
8. Record Bases	_____	_____	_____
9. Jaw Relation Records	_____	_____	_____
10. Wax Try-In			
a. Vertical Dimension	_____	_____	_____
b. Centric Relation	_____	_____	_____
c. Shade and Mold	_____	_____	_____
d. Anterior Arrangement	_____	_____	_____
e. Cantilever length	_____	_____	_____
11. Superstructure Try-In	_____	_____	_____
12. Insertion/Home Care Instr.	_____	_____	_____
13. Post Insertion/POT Protocol	_____	_____	_____
14. Laboratory Procedures			
a. Casts	_____	_____	_____
b. Record Bases	_____	_____	_____
c. Tooth Set-up	_____	_____	_____
d. Processed Prosthesis	_____	_____	_____
e. Finished Prosthesis	_____	_____	_____

**IMPLANT PROSTHODONTICS (Cont'd)**

	<b>Acceptable</b>	<b>Needs Impr.</b>	<b>Unacceptable</b>
f. Laboratory Prescription			
1) Patient data	_____	_____	_____
2) Materials	_____	_____	_____
3) Special instructions	_____	_____	_____
15. Patient Management	_____	_____	_____
16. Time Management	_____	_____	_____

**Treatment Assessment**

- 1. Acceptable \_\_\_\_\_
- 2. Needs Improvement \_\_\_\_\_
- 3. Unacceptable \_\_\_\_\_

**Performance Standard Assessment**

Resident \_\_\_\_\_  
Mentor \_\_\_\_\_  
Date \_\_\_\_\_

**COMMENTS:**



# ADVANCED SPECIALTY EDUCATIONAL PROGRAM IN PROSTHODONTICS

## CONSULTANT EVALUATION

Consultant: \_\_\_\_\_ Date: \_\_\_\_\_  
Subject: \_\_\_\_\_ Hours of Instructions: \_\_\_\_\_

Please evaluate the consultant, his presentation and the subject matter according to the following scale.

	Outstanding	Excellent	Satisfactory	Marginal	Unsatisfactory
Score:	1	2	3	4	5

### Consultant:

1. The consultant's objectives for the lecture were clearly stated. \_\_\_\_\_
2. The consultant was well prepared. \_\_\_\_\_
3. The consultant summarized and/or emphasized the major points of the presentation. \_\_\_\_\_
4. The consultant made good use of examples and/or illustrations to help clarify the material. \_\_\_\_\_
5. The consultant raised challenging questions to encourage individual thinking. \_\_\_\_\_
6. The consultant answered questions clearly and concisely. \_\_\_\_\_

### Presentation:

1. The material was well organized and presented in a logical and sequential fashion. \_\_\_\_\_
2. The slides and/or demonstrations were effective. \_\_\_\_\_
3. The value of supplement materials; handouts, references, etc. \_\_\_\_\_

### Subject Matter:

1. The level of information presented was appropriate for a Prosthodontic Residency. \_\_\_\_\_
2. The material presented was based on up-to-date professional information. \_\_\_\_\_
3. The subject matter presented related directly to the lecture objectives. \_\_\_\_\_
4. The subject matter presented contributed to my knowledge in this area. \_\_\_\_\_

### Overall Evaluation:

The overall value of the consultation, presentation and subject matter. \_\_\_\_\_

### Additional Comments:

**ADVANCED SPECIALTY EDUCATIONAL PROGRAM IN PROSTHODONTICS**  
**RESIDENT EVALUATION - ORAL PRESENTATION**

Resident: \_\_\_\_\_ Date: \_\_\_\_\_

Presentation: \_\_\_\_\_ Evaluator: \_\_\_\_\_

During the resident's presentation please rate the following points and return to the Director, Prosthodontic Residency. Your rating will be used in evaluating the performance of the resident in his/her oral presentation and in identifying areas in which he/she excels or needs improvement. Please rate according to the following scale. Keep in mind that the average resident is satisfactory, a score of 3.

	Outstanding	Excellent	Satisfactory	Marginal	Unsatisfactory	
Score:	1	2	3	4	5	
1. <b>Appearance:</b> Proper dress, in good condition. Well groomed.						_____
2. <b>Speaking Presence:</b> Good posture. No distracting head or body movements. Eye contact with the audience. Personality forceful and authoritative, yet pleasant. Did not read presentation.						_____
3. <b>Voice Control:</b> Loud enough to be heard. Projected to audience. Proper inflection, not monotonous. Enunciation clear and distinct, not mumbled. Neither too fast nor too slow. Proper pauses without "and-uh's" or "you know".						_____
4. <b>Organization:</b> Material well organized and presented in logical sequence. One subject led smoothly into the next. Compatible with allotted time.						_____
5. <b>Audio-Visual Aids:</b> All equipment used was checked and functioning properly. Visual aids were clear, well thought out, easy to visualize and understand, not distracting and added to the presentation.						_____
6. <b>Subject Matter:</b> Speaker projects a thorough knowledge of the subject, beyond the actual presentation.						_____
7. <b>Audience Reception:</b> Held attention. Related to audience. Material well received, accepted as factual, interesting and of value.						_____
8. <b>Question Period:</b> Answers were factual, well organized, clear and concise.						_____
9. <b>Potential:</b> The residents potential for public speaking and teaching.						_____

**Comments:**

## **ADVANCED SPECIALTY EDUCATIONAL PROGRAM IN PROSTHODONTICS**

### **END OF YEAR PROGRAM CRITIQUE**

Please evaluate the following aspects of the residency program. General comments on other aspects of the program are also appropriate, use back of page if necessary.

1. Supplies:

2. Equipment:

3. Facilities:

4. Assistants:

5. Lab Technicians:

6. Mentors:

7. Resident Orientation Courses:

8. Curriculum: Scope, Time - Didactic vs. Clinical/Laboratory, etc.
  
9. Evaluations: Resident, Written and Oral, Standard of Care, etc.  
(Frequency, evaluation criteria, forms used for, etc.)
  
10. Conferences: Occlusion, Topic Seminar, Literature Review,  
Treatment Planning, etc.
  
11. Consultants: Number, variety, quality.
  
12. Research Paper:
  
13. Resident Oral Presentations:
  
14. What change, if any, would you make in the overall structure of the program?
  
15. Additional comments on any aspect of the program.

**ADVANCED SPECIALTY EDUCATIONAL PROGRAM IN PROSTHODONTICS**  
**END-OF-PROGRAM CRITIQUE**

Use back of page for additional comments.

1. Did the University of Maryland fulfill your expectations for a Prosthodontic Residency?

2. Did the University of Maryland Residency accomplish the stated objectives by producing:

	<b>YES</b>	<b>NO</b>
a. Knowledgeable and skilled clinicians	_____	_____
b. Prosthodontists able to serve as mentors?	_____	_____
d. Prosthodontists qualified and able to be certified by the American Board of Prosthodontics	_____	_____

3. What changes, if any, would you make in the overall structure of the residency?

4. Were the facilities (clinical, laboratory, lecture) adequate? If not, how could they be improved?

5. Were there sufficient, competent auxiliary personnel? If not, what changes should be made?

6. Were necessary materials, supplies and equipment adequate? If not, what changes should be made?

7. Was there a proper ratio of didactic experience to clinical experience, including laboratory? If not, what changes should be made?
  
8. What were the residency's strongest areas and why?
  
9. What were the residency's weakest areas and why?
  
10. Please comment on any of the following areas.
  - a. Research Paper:
  
  - b. Treatment Planning Conferences:
  
  - c. Literature Reviews:
  
  - d. Joint Seminars:
  
  - e. Basic Science Courses:
  
  - f. Resident Lectures:

- g. Visiting Consultants:
  
- h. Practice Management/Administration:
  
- i. Library:
  
- j. Resident Evaluations:
  
- k. Teaching Staff:
  
- l. Director of Residency:
  
- m. Additional comments on any aspect of the residency:

**ADVANCED SPECIALTY EDUCATIONAL PROGRAM IN PROSTHODONTICS**  
**POST-GRADUATION CRITIQUE**

Use back of page for additional comments.

1. Current Position:
  - a. Title:
  - b. Are you teaching or a mentor?
  - c. Other positions?
  
2. Clinic Information:
  - a. Solo or group practice:
  - b. Owner or associate:
  - c. Number of chairs you use:
  - d. Number of hours per week that you practice:
  
3. Clinical Practice:
  - a. Approximate percentage of time in:
    - 1) Fixed Prosthodontics
    - 2) Complete Denture Prosthodontics
    - 3) Removable Partial Prosthodontics
    - 4) Maxillofacial Prosthetics
    - 5) Implant Prosthodontics
    - 6) Craniomandibular Disorders
    - 7) Other Clinical
  
  - b. Training in your Residency for your present clinical situation was, in your opinion: (Rank the following on a scale of 1 = excessive to 5 = inadequate)
    - 1) Fixed Prosthodontics
    - 2) Removable Prosthodontics
    - 3) Maxillofacial Prosthetics
    - 4) Craniomandibular Dysfunction
    - 5) Implant Prosthodontics

c. Looking back on your Prosthodontics Residency, how would you modify the following:

	Maintain	Increase	Decrease
1) Fixed Prosthodontics	_____		
2) Removable Partial Prosthodontics	_____		
3) Complete Denture Prosthodontics	_____		
4) Maxillofacial Prosthodontics	_____		
5) Craniomandibular Disorders	_____		
6) Implant Prosthodontics	_____		
7) Administration	_____		
8) Visiting Consultants	_____		
9) Research Paper	_____		
10) Resident Lectures	_____		
11) Literature Reviews	_____		
12) Treatment Planning Conference	_____		
13) Topic Seminars	_____		
14) Occlusion Seminars	_____		
15) Digital Technology	_____		

d. Would you delete or eliminate any of the above listed activities? If, yes list the activity and briefly explain why?

5. American Board of Prosthodontics:

- a. Have you passed the Phase I written exam?
- b. Have you completed any of the other phases?
- c. Do you plan to complete the Board Examination?



- e. Implant Prosthodontics:
  
- f. Craniomandibular Disorders:
  
- g. Consultants:
  
- h. Basic Science Courses:
  
- i. Interaction with other disciplines: (Endo, Perio, etc.)
  
- j. Literature Reviews:
  
- k. Other:



## **APPENDIX A**

### **UNIVERSITY OF MARYLAND SCHOOL OF DENTISTRY ADVANCED SPECIALTY EDUCATION PROGRAM IN PROSTHODONTICS BALTIMORE, MARYLAND**

#### **THIRD YEAR RESIDENT (2020-2023)**

Dr. Philip Mui (Case Western '20)

#### **SECOND YEAR RESIDENTS (2021-2024)**

Dr. Omar Al Qabandei (Creighton University '13)  
Dr. Vinay Kumar Madavan (UCSF '13)  
Dr. Mamdouh Omar Kachlan (Temple University '21)

#### **FIRST YEAR RESIDENTS (2022-2025)**

Dr. Emily Bentz (University of Pittsburgh 22')  
Dr. Nicki Gershberg (Harvard University 22')  
Dr. Paul Lee (Virginia Commonwealth University 22')  
Dr. Travis Lux (University of Pittsburgh 21')

## CLINICAL FACULTY

- Radi Masri DDS, MS, PhD, Director, Prosthodontic Residency Program
- Chris Choi, DDS, MS
- Carl F. Driscoll, DMD
- Guadalupe Garcia, DDS
- Dima Ghunaim, DDS, MS
- Michael Hsu, DDS, MS
- Peterson Huang, DDS, MS
- Amerlia Orta, DDS, MS
- Garima Talwar, DDS, MS
- Loana Tovar Suinaga, BDS, MS
- William Wahle, DDS, MS
- Jenin Yahya, BDS, MS
- Ahmad Majeed-Saidan, DDS, MS
- Dr. Hanae Saito, DDS, MS
  
- **Diplomate of the American Board of Prosthodontics**
- **Diplomate of the American Board of Periodontics**

## **APPENDIX B**

### **RESIDENT ORIENTATION**

The first year prosthodontic residents will participate in an orientation program that will introduce them to the residency goals, objectives, administrative procedures, and assignments as well as provide an overview of the clinical and laboratory skills required of the specialty. The new resident kit of supplies and equipment will also be issued. During this orientation period, the following topics are addressed:

- a) General Orientation, Issue Course Materials/Kit
- b) Oral Photography Seminar
- c) Fixed Prosthodontic Exercise
- d) Removable Prosthodontic Exercise
- e) CPR recertification
- f) Implant Introduction
- g) Occlusion

### **CLINICAL PHOTOGRAPHY**

#### **1. Objective:**

- a) To establish and in-depth knowledge of clinical photography.
- b) To become proficient in taking intra and extra oral photographs.
- c) To develop an in-depth knowledge of what views are required for the American Board of Prosthodontics Examination.

#### **2. Guidelines:**

- a) This block of instruction/practical exercise will include topics on equipment selection, oral photographic procedures and principles, mirror positioning, and the clinical photo series.
- b) Residents will use their own digital camera and participate in a practical exercise on mirror positioning and taking the clinical photo series. One-on-one instruction will insure confidence in their equipment.

## **FIXED PROSTHODONTIC ORIENTATION**

### **1. Objective:**

To acquaint the resident with fixed prosthodontic principles, clinical, and laboratory procedures.

### **2. Guidelines:**

- a) A hands-on series is given as a review of Fixed Prosthodontics to all incoming residents.
- b) The resident will be guided through the clinical and laboratory steps of diagnostic impression making through insertion of a gold crown and a PFM crown.
- c) The fabrication of a complete metal and ceramic crown to include custom tray fabrication, elastomeric impression procedure, and master cast fabrication. Waxing, casting, porcelain application and finishing procedures will also be performed.

## **REMOVABLE PROSTHODONTIC ORIENTATION**

### **1. Objective:**

Acquaint the residents with complete denture prosthodontic principles, clinical and laboratory procedures.

### **2. Guidelines:**

- a) In addition to selected lectures, the residents will receive one-on-one demonstrations on clinical procedures for the impression, jaw relation records, wax try-in, and insertion appointments. Also, they will fabricate a set of dentures on a patient and perform the following lab procedures: 1) custom trays, 2) record bases, wax rims, and articulation, 3) complete monoplane and fully balanced set-ups, 4) fully wax-up both sets of trial dentures, 5) flask, pack, and process one set of dentures, 6) deflask and complete a lab remount to check pin opening, 7) deflask, finish, and polish dentures, and 8) deliver dentures to patient.

## **DIGITAL DENTISTRY ORIENTATION**

1. **Objective:**

Acquaint the residents with clinical applications of digital prosthodontics.

2. **Guidelines:**

- a) A series of lectures (3 lectures, 2 hour each) on topics that include: Digital impressions, digital manufacturing, digital restorations, digital implant surgery, digital fixed prosthodontics and digital removable prosthodontics.
- b) In addition to the lectures, the residents will receive demonstrations on digital impressions, digital restoration design, and digital manufacturing of conventional and implant restorations.

## APPENDIX C

### SPECIAL DUTIES

#### **RESIDENTS ARE ASSIGNED DUTIES AS FOLLOWS:**

1. Dr. Bentz  
Birthday cake coordinator
2. Dr. Alqabandei and Dr. Lee  
Lab Officer, coordinate laboratory cleaning
3. Dr. Madavan and Dr. Lux  
Plan social events, such as the end of year roast.
4. Dr. Kachlan and Dr. Gershburg  
Literature review assignments (current, classic and board review question)
5. Resident of the month duties (rotates amongst all residents):  
Responsible for setting up lecture rooms, including supplies, maintenance, equipment, cleaning, and refreshments for consultant lectures.

**APPENDIX D**  
**University of Maryland**  
**PROSTHODONTICS SCHEDULE/FACULTY COVERAGE**

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:00am - Patient Tx/ MS courses  Dr. Saidan Dr. Talwar (2x/month)	7:30 am – Lit. Review  10:00am- Patient Tx  10:00-12:00 MXF Course or Biomaterials Course Drs. Driscoll/Ghuniem	8:00am - Patient Tx/ MSOB courses   Drs. Choi/Hsu	8:00am - Resident Lecture 9:30am - Tx Planning Conference  10:45am - Board Questions Drs. Masri/Driscoll	8:00am - Patient Tx  Dr. Tovar Dr. Driscoll
12:00 - 1:00 pm  LUNCH	12:00 - 1:00 pm  LUNCH	12:00 - 1:00 pm  LUNCH	12:30 - 1:00 pm  LUNCH	12:00 - 1:00 pm  LUNCH
1:00-5:00 - Patient Tx/ MS courses  Dr. Tovar-Suinaga Dr. Talwar (2x/month)	1:00-5:00 - Patient Tx  Drs. Choi / Garcia	1:00-5:00pm - Patient Tx  Drs.Orta / Ghunaim	1:00-5:00 Patient X/Conjoint Seminar  Drs. Orta/Wahle/Masri Dr. Huang (2X/month)	1:00-5:00pm – Research/occlusal course Implant clinics  Dr. Saito Dr. Majeed-Saidan



**APPENDIX F**

**MENTOR CHECKLIST**

**BOARD CERTIFICATION EXAMINATION PATIENT PREPARATION**

Each Resident will complete a patient's treatment which will qualify for presentation for Section B or Section D of the American Board of Prosthodontics Examination. Each step of this patient care will be approved by the Prosthodontic mentors. All steps must be signed by each mentor unless one of the mentors chooses to sign for other mentors.

<b>PART 2-FPD AND RPD</b>	Masri	Driscoll	Tovar/Orta
a. Patient Selection			
b. Diagnostic Casts			
c. Pantograph tracings/Cadiax			
d. Preliminary photographs			
e. Preliminary dental radiographs			
f. Preliminary treatment plan			
g. Diagnostic wax-up (treatment plan)			
h. Diagnostic tooth prep on diagnostic casts			
i. Preliminary tooth prep (alginate impression for cast evaluation by mentors before final impression)			
j. Final tooth preparation/Photos			
k. Wax patterns for crowns and fixed partial denture(s)			
l. Casting try-in (including dental radiographs).			
m. Casts of crowns-pre- cem			
n. Final cast(s) for removable partial denture(s)			
o. Patient's treatment completed			
p. Mock Board Presentation			

<b>PART 3-FIXED</b>	Masri	Driscoll	Tovar/Orta
a. Patient Selection			
b. Diagnostic Casts			
c. Pantograph tracings			
d. Preliminary photographs			
e. Preliminary dental radiographs			
f. Preliminary treatment plan			
g. Diagnostic wax-up (treatment plan)			
h. Diagnostic tooth prep on diagnostic casts			
i. Preliminary tooth prep (alginate impression for cast evaluation by mentors before final impression)			
j. Final tooth preparations			
k. Wax patterns for crowns and fixed partial denture(s)			
l. Casting try-in (including dental radiographs).			
m. Casts of restorations pre-cementation			
n. Patient's treatment completed			
o. SIMULATED BOARD PRESENTATION			

<b>PART 4-REMOVABLE</b>	Masri	Driscoll	Tovar/Orta
a. Patient Selection			
b. Diagnostic Casts			
c. Preliminary photographs			
d. Preliminary dental radiographs			
e. Preliminary treatment plan/exam form			
f. Final impressions			
g. Maxillo-mandibular relationship records			
h. Wax trial dentures (articulator)			
i. Final try in			
j. Prescription form			
k. Remount relationship			
l. Delivery			
m. Patient's treatment completed			
n. SIMULATED BOARD PRESENTATION			

**APPENDIX G  
ADVANCED SPECIALTY EDUCATION PROGRAM IN PROSTHODONTICS**

**SENIOR RESIDENT CHECKOUT**

Graduating residents **must** obtain initials of a program director prior to final clearing of the University of Maryland Prosthodontic Residency.

1. Clinical Requirements..... \_\_\_\_\_
2. Academic Requirements..... \_\_\_\_\_
3. Laboratory Requirements..... \_\_\_\_\_
4. Research Paper..... \_\_\_\_\_
5. Board Case..... \_\_\_\_\_
6. Office..... \_\_\_\_\_
7. Library Books..... \_\_\_\_\_
8. Equipment Clean-up and Turn-In..... \_\_\_\_\_
9. Case Transfer Information..... \_\_\_\_\_
10. Patient Treatment Information..... \_\_\_\_\_  
(Ms. Michelle Keener)
11. Course Critique..... \_\_\_\_\_

Resident: \_\_\_\_\_ Date: \_\_\_\_\_