Clinical Anaplastology Trainee/Assistant Position

Document created by Juan Garcia, MA, CCA, Director of the Johns Hopkins University Anaplastology/Facial Prosthetics Clinic

Position Description

General Purpose of Work:
A Clinical Anaplastologist is a health care professional that provides custom-designed, fabricated and fitted extra-oral aesthetic prostheses or other medical devices that are non-weight bearing, as specified in the Board for Certification in Clinical Anaplastology (BCCA) Scope of Practice. These devices usually include facial, ocular, and somatic prostheses. Provision of care is based on a physician’s referral and clinical assessment to support, modify, replace, protect or restore an anatomical structure.

Primary Duties and Responsibilities:
The role of the Trainee is to support the clinical activities of the Director of the Anaplastology Clinic in making facial and body prostheses for patients by training in all aspects of this service including: assessment, treatment planning, implementation, device delivery, patient education, follow up care, and ethical and professional standards.

Trainee will be responsible for setting their own hours of work, with a minimum expectation of 32 hour work week. Projects will be given on a per case basis and may involve some independent work. All work done directly with patients will be supervised. The Trainee will be given an opportunity to interact with other professionals involved in the care of patients and provision of services (e.g. maxillofacial prosthodontists, facial plastic surgeons, ocularists, dental laboratory personnel, advanced 3D technology technicians).

Extent of Supervision:
Trainee will be directly supervised by the Director of the Anaplastology Clinic.

Working Environment, Conditions, and Protective Devices:

<table>
<thead>
<tr>
<th>a) WORK ENVIRONMENT</th>
<th>FREQUENCY</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor Work:</td>
<td>4</td>
<td>Occasional going to OR to observe surgery on patients</td>
</tr>
<tr>
<td>Outdoor Work:</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Work in Operating Rooms</td>
<td>2</td>
<td>20 miles away in Owings Mills. Trainee to provide for transportation</td>
</tr>
<tr>
<td>Work in Remote Office</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Walking to Hospital Clinics</td>
<td>1</td>
<td>To see patients and physicians in Plastics, Otolaryngology, and other</td>
</tr>
<tr>
<td>Walking on slippery surfaces:</td>
<td>2</td>
<td>Flooring in laboratory and clinic areas is potentially slippery.</td>
</tr>
<tr>
<td>Dust:</td>
<td>2</td>
<td>Exposure to dust while mixing alginate impression material, modifying</td>
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<tr>
<td></td>
<td></td>
<td>plaster casts, mixing plaster, grinding acrylic and plaster</td>
</tr>
<tr>
<td>Vapor/Fumes:</td>
<td>3</td>
<td>Mixing acrylic, painting acrylic</td>
</tr>
<tr>
<td>Noise:</td>
<td>2</td>
<td>Drilling acrylic, vacuum mixing of plaster. Vacuum pump for de-airing</td>
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<tr>
<td></td>
<td></td>
<td>silicone</td>
</tr>
<tr>
<td>Moving Objects:</td>
<td>1</td>
<td>Model trimmer, dental hand piece, lathe</td>
</tr>
<tr>
<td>Hazardous Machinery:</td>
<td>2</td>
<td>Model trimmer, dental hand piece, lathe</td>
</tr>
<tr>
<td>Tools (sharp):</td>
<td>4</td>
<td>Surgical knives, plaster knives, sculpting tools</td>
</tr>
<tr>
<td>Tools (heated):</td>
<td>3</td>
<td>Used in sculpting wax prosthesis prototypes</td>
</tr>
<tr>
<td>Congested Work Space:</td>
<td>3</td>
<td>Space in clinic area is limited</td>
</tr>
<tr>
<td>Confined Work Space:</td>
<td>3</td>
<td>Office space is limited, behind a cubicle workstation, and is somewhat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>confined</td>
</tr>
<tr>
<td>Vibration:</td>
<td>2</td>
<td>Plaster mixer, vibrator</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Lighting:</td>
<td>0</td>
<td>Working in brightly lit room in order to do fine detailed work</td>
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<tr>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Sharps/Needle Stick Exposure:</td>
<td>0</td>
<td>Any such exposure should be reported immediately to Clinic Director</td>
</tr>
<tr>
<td>Blood Exposure:</td>
<td>3</td>
<td>Area around implant site may be inflamed and bleeding in some patients.</td>
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<tr>
<td></td>
<td></td>
<td>Infection control protocols address this.</td>
</tr>
<tr>
<td>Body Fluid Exposure:</td>
<td>3</td>
<td>Impression and wax sculpting in the midface is often covered in mucous.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Infection control protocols address this.</td>
</tr>
</tbody>
</table>
Odor Exposure: 2
Some patients may have unpleasant odors (i.e. necrotic tissue in some sites). Some chemicals used also have strong odors (i.e. methylmethacrylate). Appropriate ventilation and OSHA approved masks are provided.

Harmful Chemical, Toxic Material Exposure: 3
Acrylic, methanol, acetone, trichlorethane, xylene, bonding primers, plaster dust containing silica. Dust collection and fume extraction systems in place to address this as well as OSHA approved masks.

Infection Exposure: 2
With certain patients. Infection control protocols address this.

### WORKING CONDITIONS

<table>
<thead>
<tr>
<th>FREQUENCY</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Supervised training by Director at all times</td>
</tr>
<tr>
<td>4</td>
<td>Team based care is the norm</td>
</tr>
<tr>
<td>3</td>
<td>Adhere to schedule</td>
</tr>
<tr>
<td>4</td>
<td>Work is done in front of patient and often family members</td>
</tr>
<tr>
<td>2</td>
<td>See Tools and Hazardous Machinery</td>
</tr>
</tbody>
</table>

### PROTECTIVE DEVICES

<table>
<thead>
<tr>
<th>FREQUENCY</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Required to wear closed toe shoes</td>
</tr>
<tr>
<td>2</td>
<td>When polishing acrylic and grinding plastic and acrylic</td>
</tr>
<tr>
<td>3</td>
<td>Used with certain patients and in lab with certain materials</td>
</tr>
<tr>
<td>3</td>
<td>Used with certain patients and in lab with certain materials</td>
</tr>
<tr>
<td>1</td>
<td>On occasion, protective mask/shield is worn with certain patients</td>
</tr>
</tbody>
</table>

### Minimum Requirements

**Education:**
Trainee is required to have completed a Baccalaureate degree (B.A., B.S., B.F.A). Trainee should demonstrate high academic standing in all coursework.

Science coursework requirements are in each of the following areas: Vertebrate Anatomy (with dissection), Vertebrate Physiology, Organ Histology, and Inorganic and/or General Chemistry (for Science Majors).

Art coursework with an accompanying portfolio of artwork is required demonstrating artistic ability in the following areas: General Drawing, Figure or Portrait Drawing, Figure or Portrait Sculpture, Color Media (demonstrating accomplished use of watercolor, opaque paint media and colored pencil. Subject matter should include examples of portraiture, landscape and still life rendered in a representational manner demonstrating the ability to match colors accurately and to create form and space with color). One course in English composition is also required.

Additional recommended coursework includes: Digital Media (Drawing, illustration, painting, 3D modeling, 3D animation, multimedia presentations), Art History, and Photography.

**NOTE:** Candidates with a non-standard clinical education will also be considered. However, emphasis on years of clinical training and work experience as well as membership in professional organizations will be considered for acceptance into the program.

Preference is given to individuals with a formal degree in medical illustration interested in further training in anaplastology.

**Preferred Skills:**
Previous exposure in the following areas is preferred: CPR certification, dental laboratory materials/techniques, and other anaplastology related knowledge and skills (prosthetic sculpting, moldmaking, impression taking, and casting). Although previous exposure to these are preferred, they will be covered as part of the training program.

**Tuition, Stipend, Fees**
Tuition is arranged on an individual basis, based on the course of study. Trainees are individually responsible for their transportation, room, and board expenses.

Trainees are required to pay a Materials Fees to cover the costs of materials which will be provided for use in projects. Trainees are also required to pay for a University-required medical insurance policy.
Financial Assistance
Financial assistance is not available for the Clinical Anaplastology Training Program. Individuals are responsible for assuming the full cost of their tuition, materials, insurance, transportation, room and board expenses. Trainees are eligible to make use of the Johns Hopkins Shuttle Bus to and from the Medical School Campus.

Uniform/Work Attire Requirements
Trainee is to purchase and maintain clean scrubs that are to be used as a uniform during working hours. In addition, a white lab coat is required during meetings with other professionals. Closed toe shoes are to be worn at all times. Professional attire is required on occasion.

Certificate of Successful Completion Upon Completion
Upon successful completion of the term, the trainee will be awarded a Certificate of Successful Completion of the Anaplastology Training Program from the Department of Art as Applied to Medicine. The certificate will document the period of time of supervised clinical training and will be signed and approved by the Director of the Anaplastology Clinic, the Department Chairman, and the Johns Hopkins University School of Medicine Office of the Registrar.

Description of Training Experience
Term of Training:
The Trainee is appointed for a period based on individual consideration. The position is filled at the discretion of the Anaplastology Clinic Director, but typically on an annual basis.

Pre-Clinical Coursework

*These pre-clinical courses offer a separate certificate upon successful completion.

Program Areas of Study
Pathology of Facial Cancers, Medical Terminology for Anaplastologists, Histology for Anaplastologists, Anaplastology Clinic Hygiene & Infection Control Protocols, Human Anatomy with Dissection with special emphasis on Head & Neck Anatomy, and Ophthalmological Anatomy for Anaplastologists.

Suggested Book Purchasing List
Modeling and Sculpting the Human Figure, by Eduard Lanteri, Dover Publishing
Fundamentals of Facial Prosthetics, Robert McKinstry Ed.
The Art of Clinical Anaplastology, by Keith Thomas
Prosthetic Rehabilitation, by Keith Thomas
Dictionary of Prosthetic Rehabilitation, by David Trainer, Robert McKinstry, and John McFall
Clinical Maxillofacial Prosthetics, by Thomas Taylor, DDS, MSD
Plastic Surgery Nurses Curriculum, by American Society of Surgical Nurses

Professional Development
Trainees will be exposed to Clinical Anaplastology Professional & Ethical Standards as defined by the Board for Certification in Clinical Anaplastology (BCCA) and the International Anaplastology Association (IAA). Trainees will be encouraged to participate in the annual meeting of the IAA as well as the meetings of other professional societies as a means of developing professional contacts and gaining exposure to professional presentations in either oral or poster presentation formats. Trainees will also be encouraged to write and submit scientific articles for publication in peer-reviewed professional journals.
Anaplastology Minimum Competency Domains and Tasks:  

**Domain I - Assessment**
- **T-1** Review patient referral information and medical history
- **T-2** Conduct patient consultation to establish expectations, assess motivation, and identify the support network
- **T-3** Perform a pre- or post-surgical physical examination of the treatment site
- **T-4** Educate the patient regarding treatment options

**Domain II - Treatment Planning**
- **T-1** Integrate assessment data and information to determine the course of treatment

**Domain III - Implementation**
- **T-1** Acquire patient physical data (e.g., measurements, tissue color, photographs, patient models)
- **T-2** Design/create the prosthetic pattern/prototype
- **T-3** Verify fit, form and function and modify the prosthetic pattern/prototype
- **T-4** Design and fabricate the mold
- **T-5** Prepare the prosthetic materials for casting (e.g., intrinsic coloration, primers, silicons, acrylics)
- **T-6** Cast and cure the prosthesis
- **T-7** Finish, fit and adjust the prosthesis (e.g., extrinsic coloration, refinement of margins, characterization)

**Domain IV - Device Delivery & Patient Education**
- **T-1** Educate the patient in the use, care and maintenance of the prosthesis and surrounding tissue
- **T-2** Assess the patient’s comfort, acceptance and use of the prosthesis

**Domain V - Follow-up Care**
- **T-1** Evaluate patient use, care, and maintenance of prosthesis and surrounding tissue
- **T-2** Adjust or replace prosthesis as necessary

**Domain VI - Ethical & Professional Standards**
- **T-1** Anaplastology practice is performed in a manner consistent with applicable ethics codes and professional standards
- **T-2** Anaplastologists maintain comprehensive and up-to-date patient records

**Minimum Competency Knowledge Areas Covered:**
- **K-1** Medical terminology
- **K-2** Anatomy
- **K-3** Roles of related health professions
- **K-4** Device terminology
- **K-5** Factors that affect treatment planning (e.g., etiology, treatment therapies, co-morbidities, prognosis)
- **K-6** Interviewing techniques
- **K-7** Barriers to communication
- **K-8** Psychosocial factors affecting patient motivation and expectations
- **K-9** Suspicious tissue
- **K-10** Infection control
- **K-11** Tissue readiness for impression
- **K-12** Treatment timelines
- **K-13** Treatment options (advantages/disadvantages)
- **K-14** Materials and products (e.g., glues, silicons, acrylics)
- **K-15** Fabrication techniques
- **K-16** Risk factors (e.g., aspiration, claustrophobia, inappropriate materials, undercuts)
- **K-17** Impression procedures (e.g., positioning, site preparation, impression materials)
- **K-18** Sculpting principles and techniques
- **K-19** Color theory
- **K-20** Hygiene protocols
- **K-21** Repair strategies
- **K-22** International Anaplastology Association (IAA) Anaplastology Code of Ethics
- **K-23** International Anaplastology Association (IAA) Clinical Practice Standards

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2 Adapted from the Board for Certification in Clinical Anaplastology Job Analysis minimum competency requirements for safe and effective practice of anaplastology.